VOLUME XXXVIII NUMBER TWO

THE NATIONAL GEOGRAPHIC MAGAZINE

AUGUST, 1920

CONTENTS

Antioch the Glorious — WILLIAM H. HALL
21 Illustrations

The Origin of American State Names
34 Illustrations — FREDERICK W. LAWRENCE

The Channel Islands — EDITH CAREY
25 Illustrations

PUBLISHED BY THE
NATIONAL GEOGRAPHIC SOCIETY
HUBBARD MEMORIAL HALL
WASHINGTON, D.C.

$3.50 A YEAR 35c. THE COPY

NATIONAL GEOGRAPHIC SOCIETY

GEOGRAPHIC ADMINISTRATION BUILDINGS

SIXTEENTH AND M STREETS NORTHWEST, WASHINGTON, D. C.

GILBERT GROSVENOR, President
JOHN JOY EDSON, Treasurer
BOYD TAYLOR, Assistant Treasurer
HENRY WHITE, Vice-President
O. P. AUSTIN, Secretary
GEORGE W. HUTCHISON, Associate Secretary
EDWIN P. GROSVENOR, General Counsel

EXECUTIVE STAFF OF THE NATIONAL GEOGRAPHIC MAGAZINE

GILBERT GROSVENOR, EDITOR

JOHN OLIVER LA GORCE, Associate Editor

WILLIAM J. SHOWALTER
Assistant Editor

RALPH A. GRAVES
Assistant Editor

JESSIE L. BURRALL
Chief of School Service

FRANKLIN L. FISHER
Chief of Illustrations Division

BOARD OF TRUSTEES

CHARLES J. BELL
President American Security and Trust Company

JOHN JOY EDSON
Chairman of the Board, Washington Loan & Trust Company

DAVID FAIRCHILD
In Charge of Agricultural Explorations, U. S. Department of Agriculture

C. HART MERRIAM
Member National Academy of Sciences

O. P. AUSTIN
Statistician

GEORGE R. PUTNAM
Commissioner U. S. Bureau of Lighthouses

GEORGE SHIRAS, 3D
Formerly Member U. S. Congress, Faunal Naturalist, and Wild-game Photographer

GRANT SQUIRES
Military Intelligence Division, General Staff, New York

WILLIAM HOWARD TAFT
Ex-President of the United States

FRANKLIN K. LANE
Formerly Secretary of Interior

C. M. CHESTER
Rear Admiral U. S. Navy, Formerly Supt. U. S. Naval Observatory

FREDERICK V. COVILLE
Botanist, U. S. Department of Agriculture

RUDOLPH KAUFFMANN
Managing Editor The Evening Star

T. L. MACDONALD
M. D., F. A. C. S.

S. N. D. NORTH
Formerly Director U. S. Bureau of Census

JOHN OLIVER LA GORCE,
Associate Editor National Geographic Magazine.

ALEXANDER GRAHAM BELL
Inventor of the telephone

J. HOWARD GORE
Prof. Emeritus Mathematics, The George Washington University

A. W. GREELY
Arctic Explorer, Major General U. S. Army

GILBERT GROSVENOR
Editor of National Geographic Magazine

ROBT. E. PEARY (Died Feb. 20)
Discoverer of the North Pole, Rear Admiral, U. S. Navy

GEORGE OTIS SMITH
Director of U. S. Geological Survey

O. H. TITTMANN
Formerly Superintendent of U. S. Coast and Geodetic Survey

HENRY WHITE
Member American Peace Commission, and Recently U. S. Ambassador to France, Italy, etc.

ORGANIZED FOR "THE INCREASE AND DIFFUSION OF GEOGRAPHIC KNOWLEDGE"

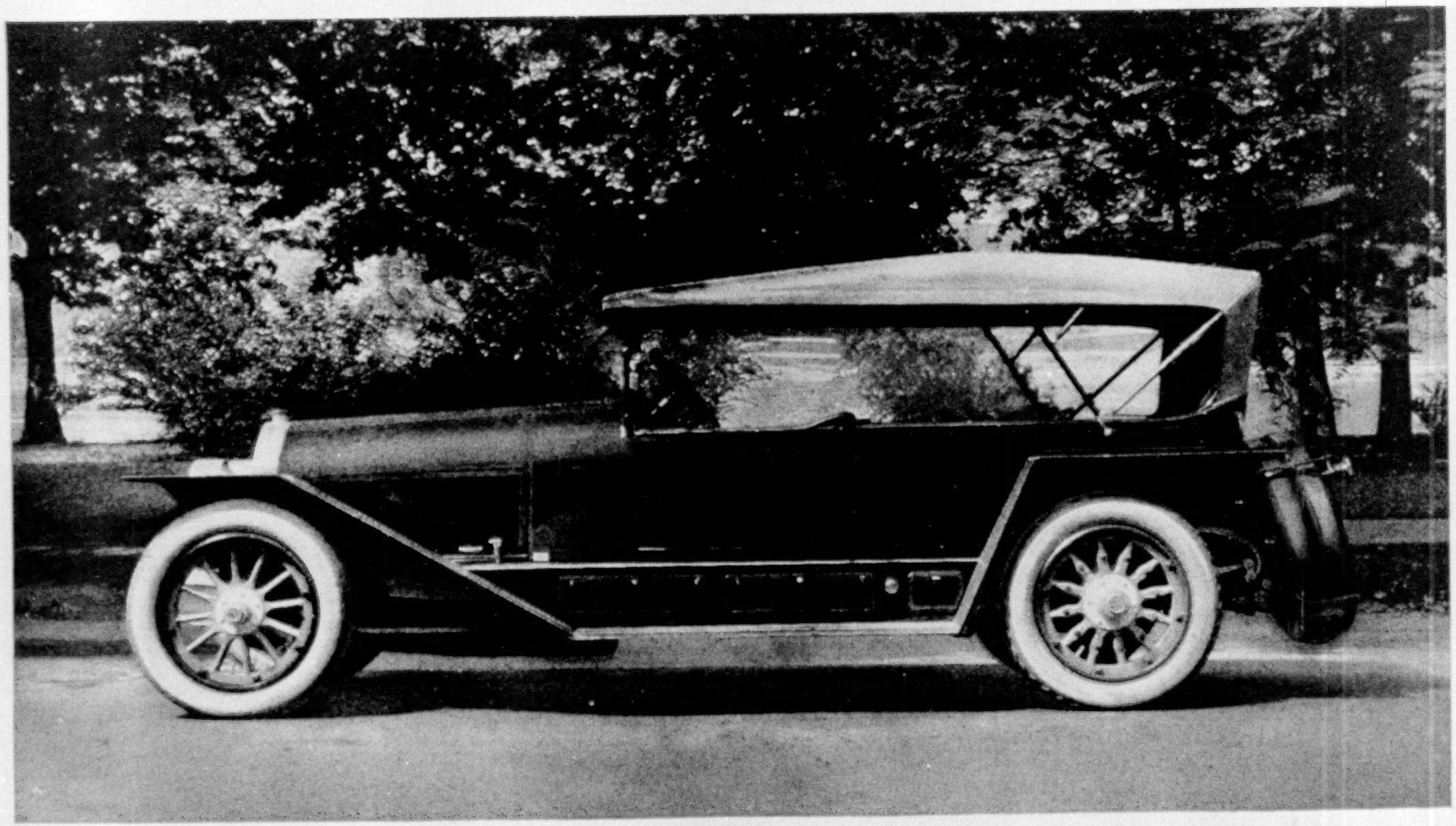
To carry out the purpose for which it was founded thirty-two years ago, the National Geographic Society publishes this Magazine. All receipts from the publication are invested in the Magazine itself or expended directly to promote geographic knowledge and the study of geography. Articles or photographs from members of the Society, or other friends, are desired. For material that the Magazine can use, generous remuneration is made. Contributions should be accompanied by an addressed return envelope and postage, and be addressed: Editor, National Geographic Magazine, 16th and M Streets, Washington, D. C.

Important contributions to geographic science are constantly being made through expeditions financed by funds set aside from the Society's income. For example, immediately after the terrific eruption of the world's largest crater, Mt. Katmai, in Alaska, a National Geographic Society expedition was sent to make observations of this remarkable phenomenon. So important was the completion of this work considered that four expeditions have followed and the extraordinary scientific data resultant given to the world. In this vicinity an eighth wonder of the world was discovered and explored—"The Valley of Ten Thousand Smokes," a vast area of steaming, spouting fissures, evidently formed by nature as a huge safety-valve for erupting Katmai. By proclamation of the President of the United States, this area has been created a National Monument. The Society organized and supported a large party, which made a three-year study of Alaskan glacial fields, the most remarkable in existence. At an expense of over $50,000 it has sent a notable series of expeditions into Peru to investigate the traces of the Inca race. The discoveries of these expeditions form a large share of the world's knowledge of a civilization which was waning when Pizarro first set foot in Peru. Trained geologists were sent to Mt. Pelee, La Soufriere, and Messina following the eruptions and earthquakes. The Society also had the honor of subscribing a substantial sum to the historic expedition of Admiral Peary, who discovered the North Pole April 6, 1909. Not long ago the Society granted $20,000 to the Federal Government when the congressional appropriation for the purchase was insufficient, and the finest of the giant sequoia trees of California were thereby saved for the American people and incorporated into a National Park.

Copyright, 1920, by National Geographic Society, Washington, D. C. All rights reserved.

Entered at the Post-Office at Washington, D. C., as Second-Class Mail Matter.

Acceptance for mailing at special rate of postage provided for in Sec. 1103, Act of October 3, 1917, authorized July 1, 1918.



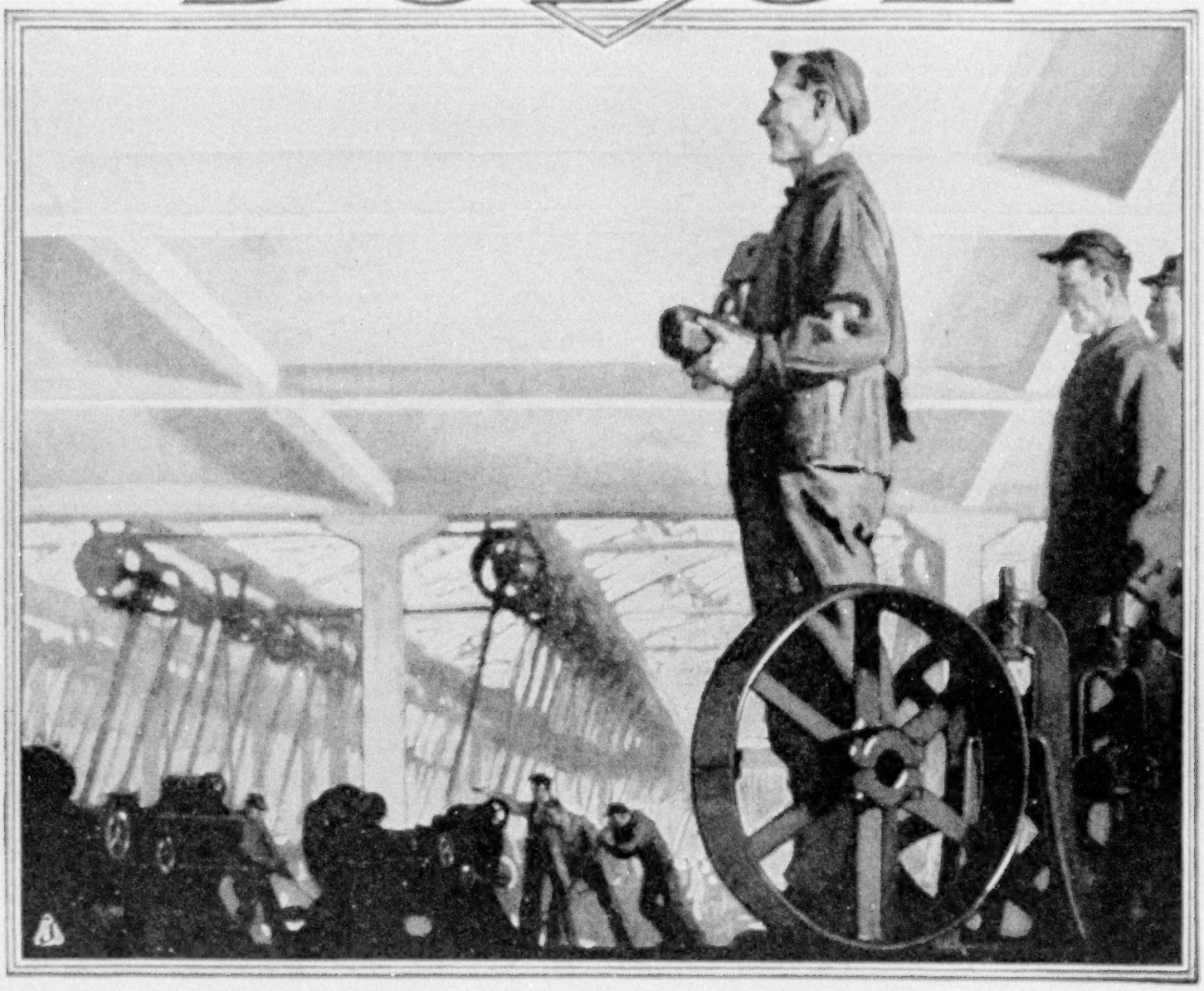
SPECIAL LOCOMOBILE TOURING CAR

This car was designed to combine the seven passenger capacity of the usual large touring car with the long graceful lines of the smaller Type Sportif.

HARE'S MOTORS, INC., NEW YORK CITY

· We Shall Keep Faith ·

DODGE

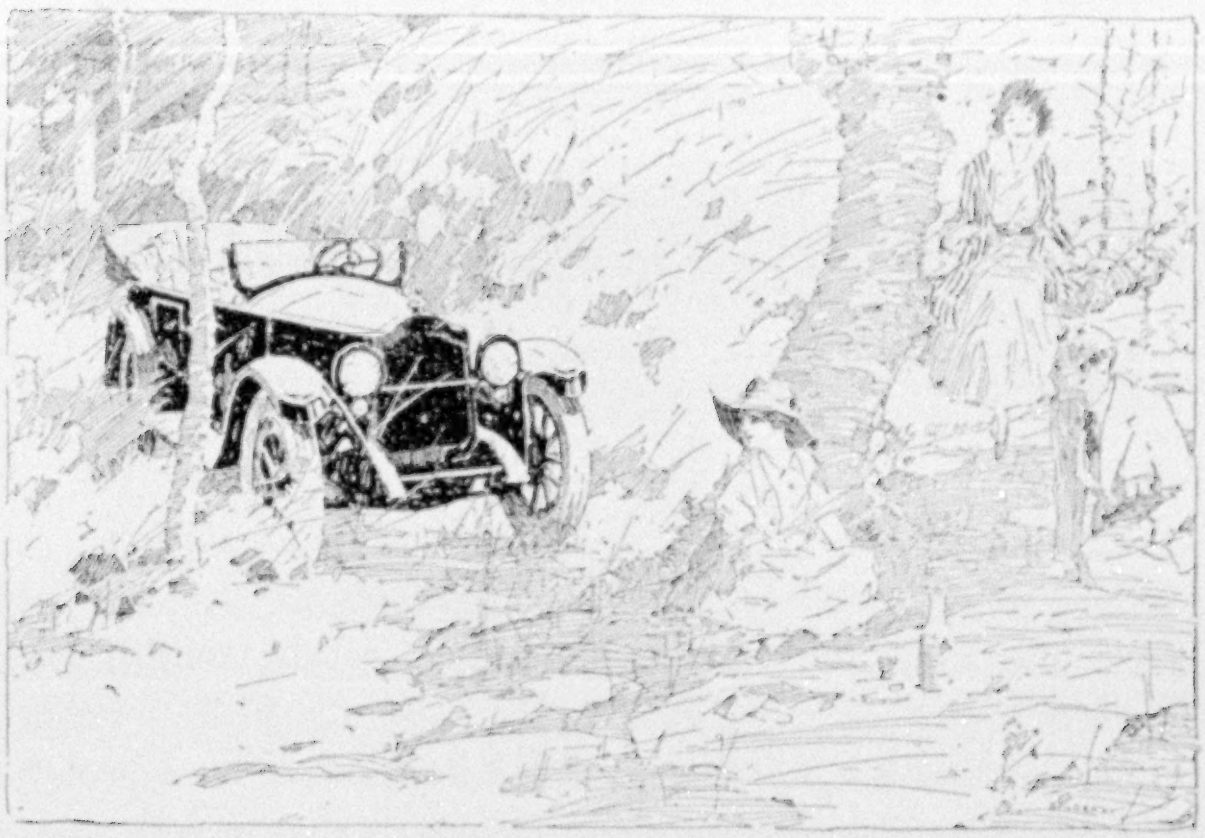


DODGE PRODUCTS are dependable—and obtainable. In thousands of plants Dodge pulleys, hangers, bearings, clutches, etc., are producing more than ever before, after years of uninterrupted service

You can always rely upon Dodge, Oneida or Keystone products to withstand the severest service with no probability of "shut-downs" due to burnt-out or worn units.

Dodge products are obtainable from dealer's stocks everywhere on the immediate delivery basis; Dodge equipment goes together right and operates identically with the millions of tons of Dodge products that, since 1882, have delivered a full ten hours' work in every day in thousands of shops all over the world.

Dodge Sales and Engineering Company
Mishawaka, Indiana and Oneida, New York
Dodge Mfg. Co of Canada Ltd., Toronto and Montreal



Who Pays for all the Discarded Cars

HOW many car owners are still running the cars they bought five years ago—or three years—or even two? As an individual, the motorist can no doubt afford the cost of replacing his car every couple of years.

As a business man, can he afford the enormous depreciation in value—the thousands of hours of skilled workmanship; the iron, steel, aluminum, fine wood and leather, discarded year after year?

As business men, car owners must be interested in Packard *unified engineering*—the balancing of one part against another, matching power with ample strength—the basis of true economy and long life.

In the Packard search for materials of *permanent value*. For example, Packard second growth hickory for wheels. Seasoned a year and a half. 6000 lbs. breaking test to the spoke.

In Packard *heat-treating* of steel—the finest plant and process of its kind today.

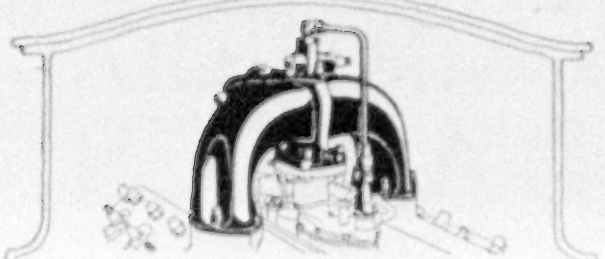
In Packard *inspection*—an inspector to every twenty workmen, and every Packard supervised from start to finish.

These things make the difference between a motor car that can go around the world if necessary and a car tied to the apron-strings of a garage mechanic.

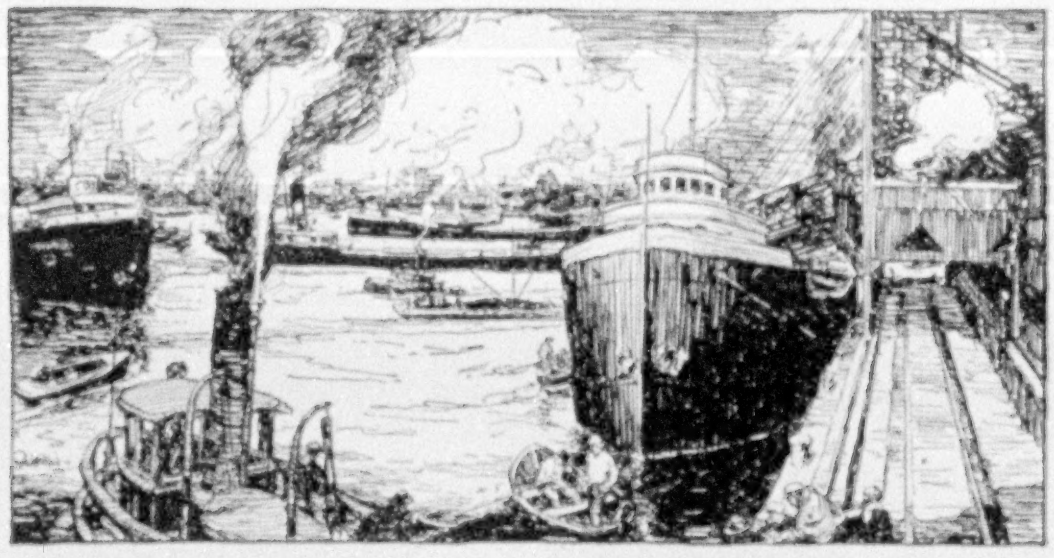
Between a car so well designed that wear is taken up by a few simple replacements and one whose parts wear beyond replacement.

Your typical Packard owner makes the present serve the future; and sees clearly what each dollar is going to *do for him* before he spends it.

PACKARD MOTOR CAR COMPANY, *DETROIT*



The Fueltizer—the latest Packard achievement, making any gasoline a perfect fuel.



Traffic-Teeming Waters

TO the industrial and economic life of the world, the importance of the Great Lakes is incalculable. From the batteaux of the fur traders, the lake carriers have grown through many stages to the great freighters that bear in their holds the ores, timber and grains from the Northwest to the furnaces and mills of the large centers.

A GREAT part of these cargoes is handled in the port of Chicago and a large part of the financing necessary to facilitate this transportation is done in Chicago.

TO the financing and development of the traffic of the Great Lakes the Continental and Commercial Banks have contributed, as they have participated in financing many other lines of commerce and industry in the rich territory tributary to Chicago.

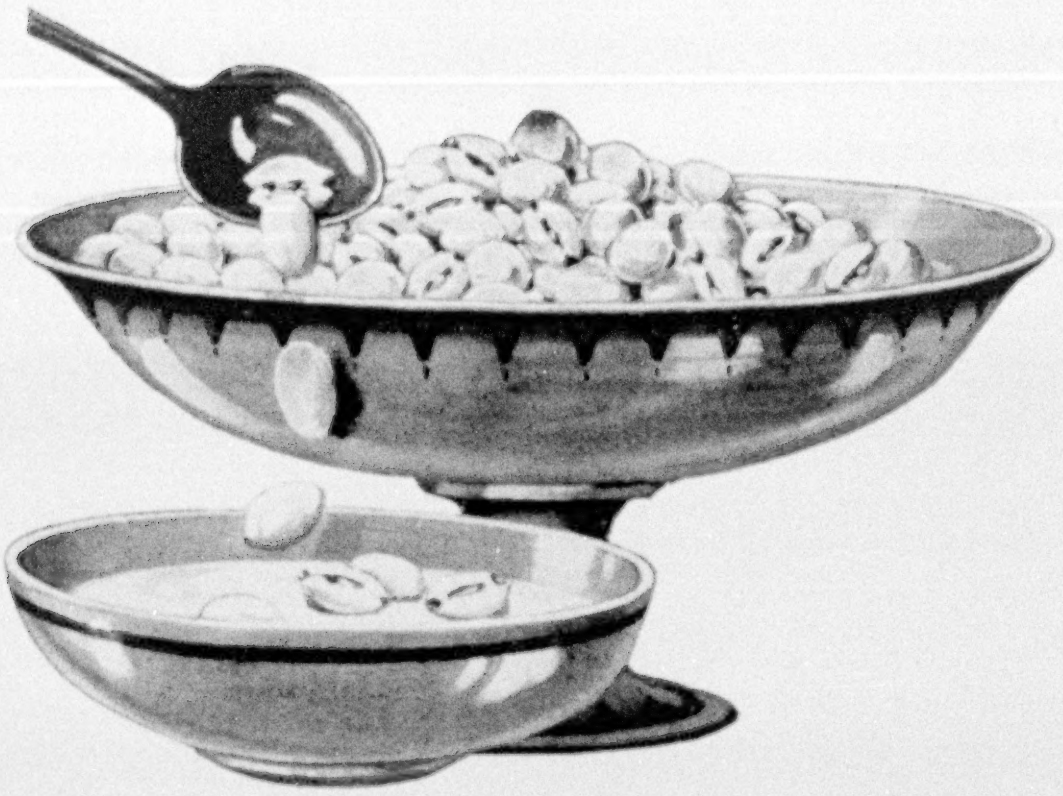
The CONTINENTAL *and* COMMERCIAL BANKS

CHICAGO

Invested Capital More Than 50 Million Dollars

Resources More Than 500 Million Dollars

"Mention The Geographic—It identifies you"



August Nights

Will bring to millions Bubble Grains in Milk

Don't put aside your Puffed Grains when breakfast ends in summer. Children want them all day long, and there's nothing better for them.

The supreme dish for luncheon or for supper is Puffed Wheat in milk. The airy grains—puffed to eight times normal size—taste like food confections. Yet every morsel is whole wheat with every food cell blasted.

The finest foods ever created

Puffed Wheat, Puffed Rice, and Corn Puffs are the finest grain foods in existence.

Never were cereals so enticing. The grains are fairy-like in texture; the flavor is like nuts. They seem like tidbits, made only to entice.

Yet they are major foods, with every food cell steam-exploded, so digestion is easy and complete.

They will take the place of pastries, sweets, etc., if you serve them all day long. And at meal-time they will make whole-grain foods tempting.

Puffed Grains are made by Prof. Anderson's process. A hundred million steam explosions occur in every kernel. They are the best-cooked grain foods in existence. Serve all three kinds, at all hours, in all the ways folks like them.

Puffed Wheat

Puffed Rice

Corn Puffs

The Three Bubble Grains

The Quaker Oats Company

Sole Makers

3407

XUM

DODGE BROTHERS 4-DOOR SEDAN

FAIRBANKS-MORSE

Farm Comforts Through Modern Power

POWER on the farm has brought new comforts and conveniences to lighten labor and make rural life still more worth while.

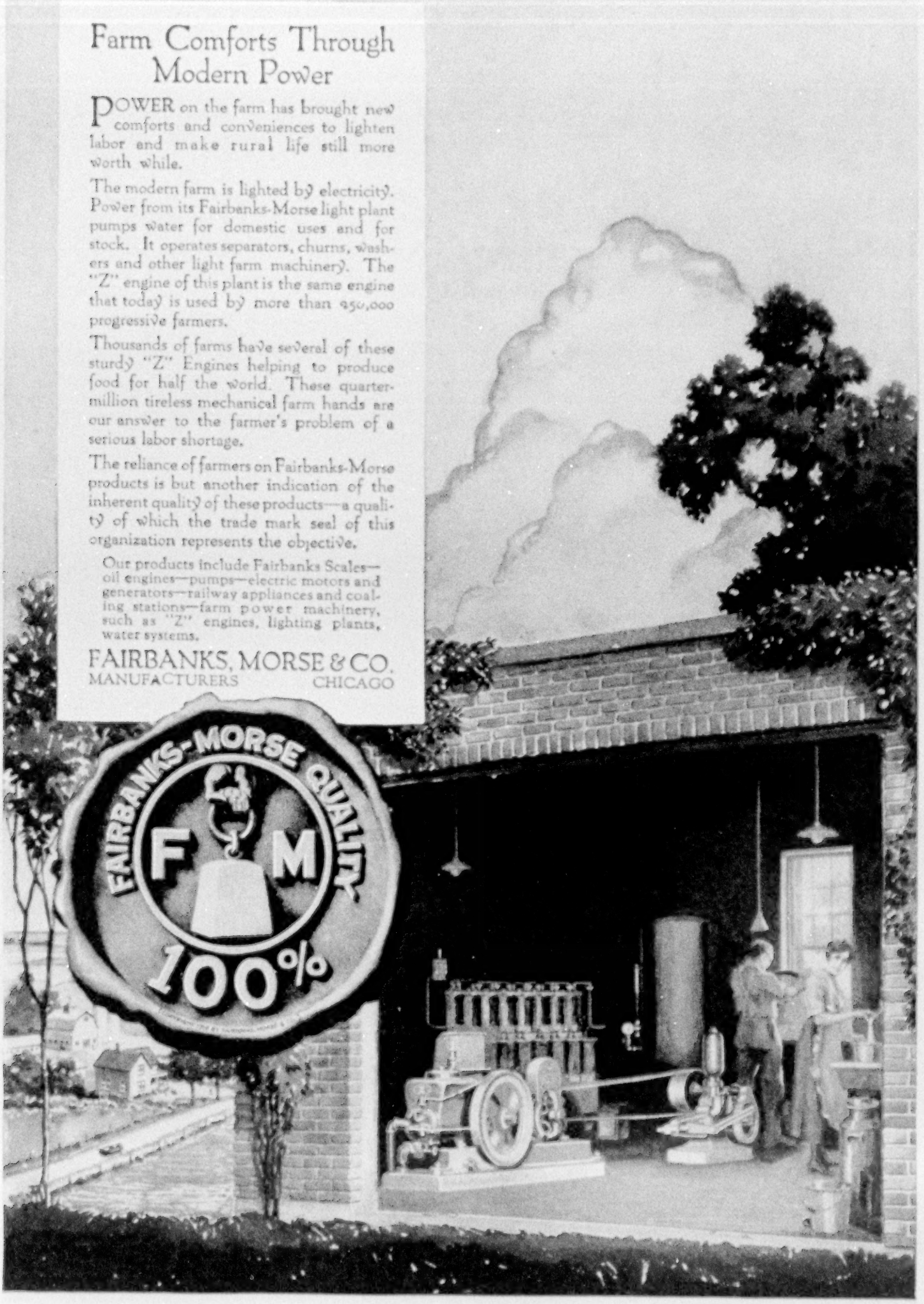
The modern farm is lighted by electricity. Power from its Fairbanks-Morse light plant pumps water for domestic uses and for stock. It operates separators, churns, washers and other light farm machinery. The "Z" engine of this plant is the same engine that today is used by more than 250,000 progressive farmers.

Thousands of farms have several of these sturdy "Z" Engines helping to produce food for half the world. These quarter-million tireless mechanical farm hands are our answer to the farmer's problem of a serious labor shortage.

The reliance of farmers on Fairbanks-Morse products is but another indication of the inherent quality of these products—a quality of which the trade mark seal of this organization represents the objective.

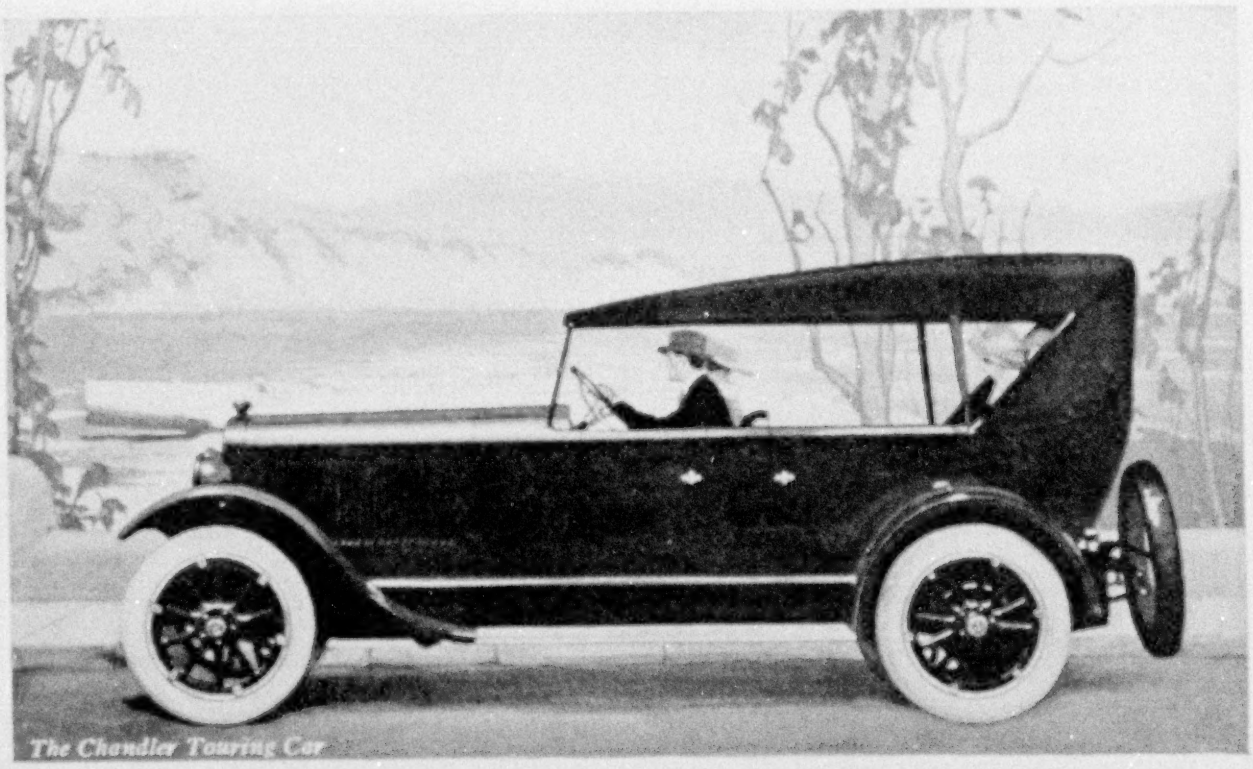
Our products include Fairbanks Scales—oil engines—pumps—electric motors and generators—railway appliances and coaling stations—farm power machinery, such as "Z" engines, lighting plants, water systems.

FAIRBANKS, MORSE & CO.
MANUFACTURERS CHICAGO



CHANDLER SIX

Famous For Its Marvelous Motor



The Chandler Touring Car

Why The Chandler Is A "First Choice" Car

CHANDLER leads so distinctly today because of its excellence, proven in the service of eighty thousand owners, and because it is so fairly priced.

Throughout the United States and in many nations abroad the Chandler is a "first choice" car. Men who can intelligently discriminate in matters of mechanical qualities, sturdiness and flexibility of speed and power, recognize the Chandler as a better car.

The Chandler Six of today is the result of the constant refinement of the *first* Chandler of seven years ago—a car perfected through careful refinement and mechanical development without radical change or questionable experimentation at any time.

Six Handsome Bodies are Mounted on the One Standard Chandler Chassis

SIX SPLENDID BODY TYPES

Seven-Passenger Touring Car, $1995 *Four-Passenger Roadster, $1995*

Four-Passenger Dispatch Car, $2075

Seven-Passenger Sedan, $2995 *Four-Passenger Coupe, $2895* *Limousine, $3495*

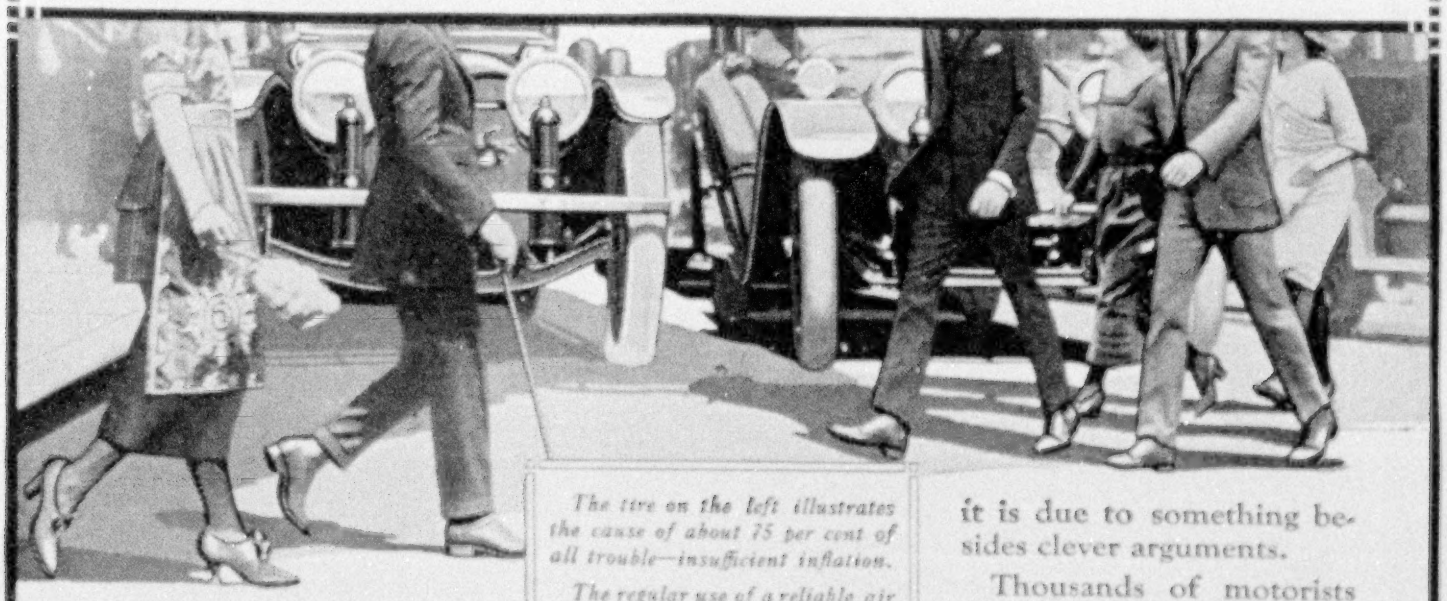
(All prices f. o. b. Cleveland, Ohio)

Dealers in all Principal Cities and Hundreds of Towns

CHANDLER MOTOR CAR COMPANY, CLEVELAND, OHIO

Export Department: 5 Columbus Circle, New York Cable Address: "CHANMOTOR"

Opinions about Tires should be *Weighed* as well as Counted



The tire on the left illustrates the cause of about 75 per cent of all trouble—insufficient inflation.

The regular use of a reliable air gauge is the best safeguard against rim cutting and fabric breakdown.

THERE is hardly a motorist who hasn't at some time or other in his experience had a tire dealer attempt to sell him a tire by representing it as the fastest seller in town.

More attempts are probably made to sell tires by playing to the motorist's alleged weakness for "crowd of buyers" than by any other known method of selling.

* * *

The *experienced* motorist, of course, refuses to surrender his individual judgment to any crowd or mass of whatever size.

Too often he has seen the results of accepting opinions at their face value, without first finding out *what they are based on.*

And you will find him going more and more to the dealer who has something to offer in support of his tires other than "crowds of buyers" and "numbers of sales."

* * *

The opinion in favor of U. S. Tires is not based solely on the number of them in use.

Great as that number is, it is due to something besides clever arguments.

Thousands of motorists today are putting up with second choice tires because forced production is *inconsistent with U. S. Standard of quality.*

The United States Rubber Company's enormous investment—greater than that of any concern in the industry—has always been aimed *solely* at quality.

Building a tire first and a market afterwards. Thinking of the *individual user* instead of the number of sales.

One of the reasons, perhaps, why there is now a scarcity of U. S. Tires.

* * *

If the time ever comes when U. S. Tires can be supplied to all, or nearly all, of the people who want them, they will still have *more to recommend them* than merely the largest following.

United States Tires

United States Rubber Company

Fifty-three Factories

The oldest and largest Rubber Organization in the World

Two hundred and thirty-five Branches

In All Countries, At All Times, Carry American Express Travelers Cheques

Issued in Three Forms

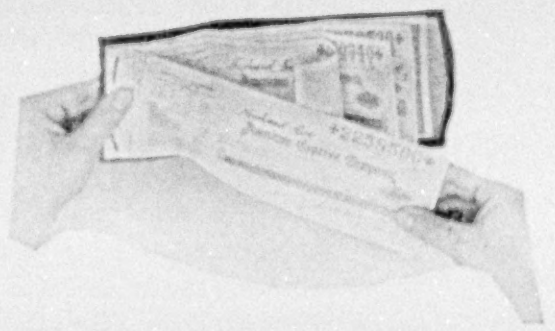
POUNDS STERLING

For use in Great Britain and the British Colonies and Dependencies. Issued in amounts of Five and Ten Pounds.

FRENCH FRANCS

For use in France and the French Colonies and Dependencies. Issued in amounts of 200 and 400 French Francs.

DOLLAR CHEQUES



For use in the United States, Canada, Alaska, Central and South America, the West Indies and the Orient.

These cheques require no other identification than your signature. They are a "travel money" insurance.

Purchasable at Banks and at Express Offices

LETTERS OF CREDIT

Convertible into Travelers Cheques or currency

The American Express Travel Department can take care of all your Travel requirements anywhere in the world.

Write Dept. N.G. about your proposed tour

AMERICAN EXPRESS COMPANY

THE LIGHTS THAT DID NOT FAIL

OUR Army and Navy asked for electric lights, big and little, bright and dim, and in a hurry. MAZDA Service knew how they should be made.

There were huge and blinding searchlights, and tiny lamps to illuminate the compasses and instrument-boards of airplanes. There was a pilot-light for dirigibles, built to float upon the water, and weighing, battery and all, one pound. There were ship-lantern lights of special blue glass, of high penetrating power and low visibility, so that no lurking U-boat should catch their glow. There were red, white and blue lamps for daylight signaling. There were lamps for gun sights, and very small ones, the size of wheat-grains, for the use of surgeons. The list could be prolonged almost indefinitely.

The accumulated knowledge and technical experience of MAZDA Service, of the chemists, physicists, metallurgists and engineers in the Research Laboratories and two score related factories, bore notable fruit in this multitude of lamps.

For more than a decade MAZDA Service has carried forward the art of electric lighting, of which the MAZDA lamp is the highest expression. From the compounding of the glass to the spinning of web-fine filaments from stubborn metal, MAZDA Service has led the way. These reserves of knowledge and experience, backed by the splendid facilities of the Research Laboratories, produced the specifications for our war lamps.

Many of them were lamps of every-day use, tried and proved fit for active duty; others were adaptations of existing types, and many were entirely new.

The war-time achievements of MAZDA Service in the development of electric lamps mean improvement and higher efficiency in peace-time lighting.

MAZDA

RESEARCH LABORATORIES OF GENERAL ELECTRIC COMPANY

General Motors Trucks

WHEREVER the big important jobs are to be done you will find GMC Trucks. It is in the strenuous work that reliability is needed most.

Reliability, along with other motor-truck requirements, depends on quality, and quality is the first GMC virtue.

For the sake of such quality nothing is ever sacrificed. Quality comes first. It is built in at the factory. It comes forth in faithful performance.

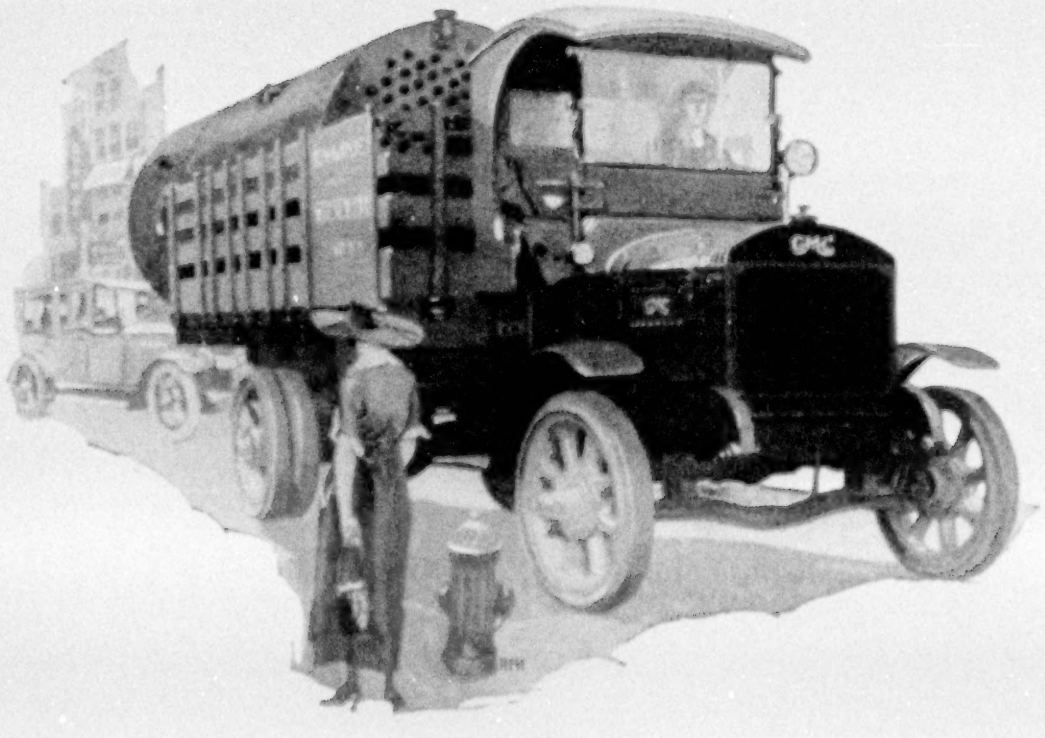
Those who know GMC Trucks best appreciate most what these statements mean.

GENERAL MOTORS TRUCK COMPANY

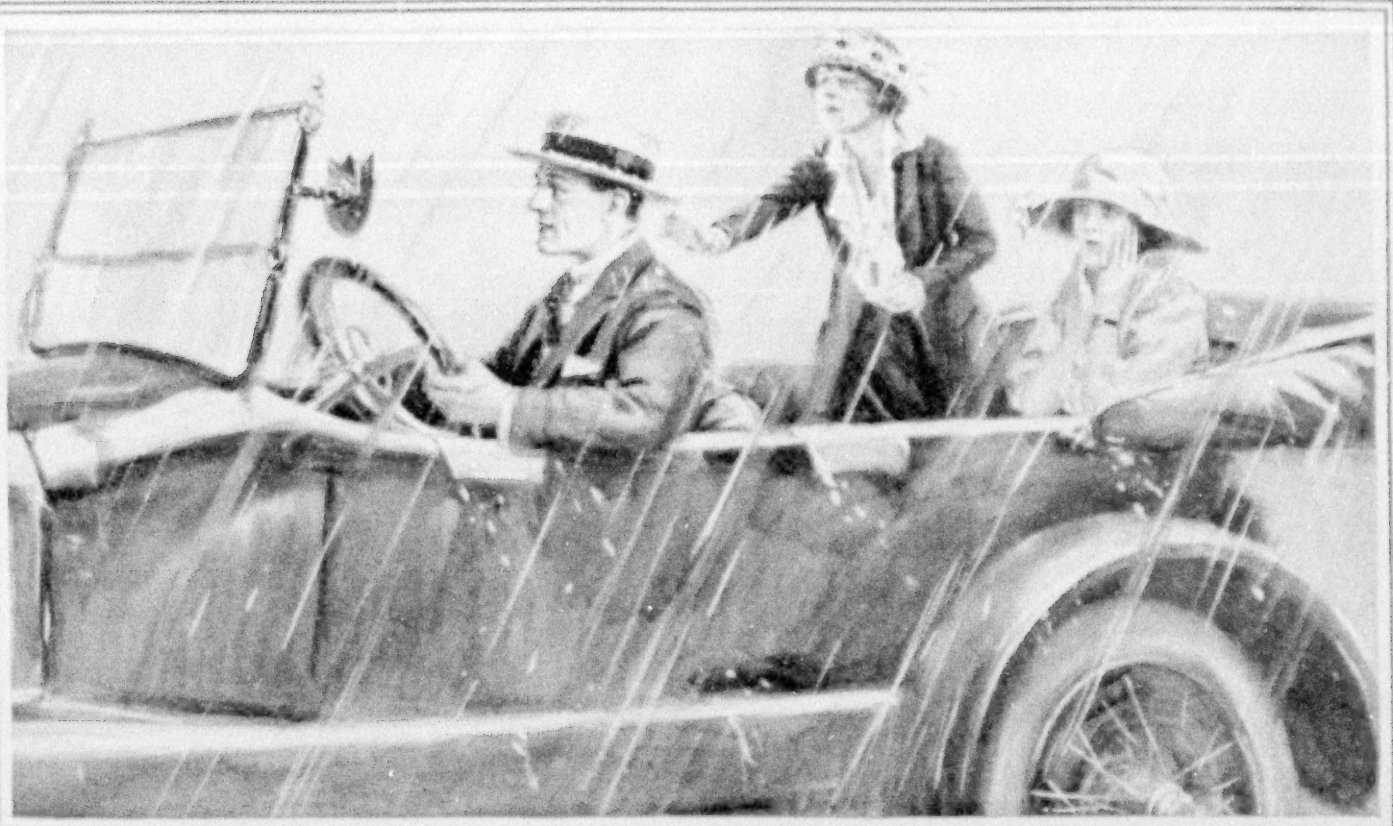
One of the Units of the General Motors Corporation

PONTIAC, MICH.

(679)



"Mention The Geographic—It identifies you"



What would you call such a man?

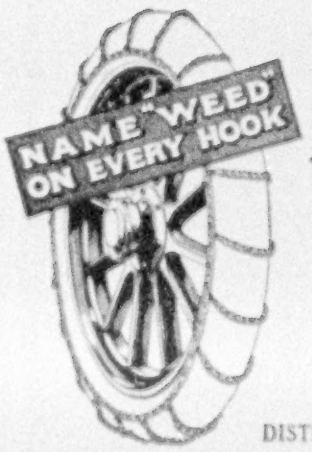
—A man who drove his automobile with the top down in a pouring rain?

Isn't he deserving of the same name if he neglects to put on Weed Tire Chains when roads and pavements are wet and slippery?

What *do you* call such a man?

Write it on the line below and mail it to him or to us.

.....



AMERICAN CHAIN COMPANY, Incorporated

BRIDGEPORT CONNECTICUT

In Canada: Dominion Chain Company, Limited, Niagara Falls, Ontario

Largest Chain Manufacturers in the World

The Complete Chain Line—All Types, All Sizes, All Finishes — From Plumbers' Safety Chain to Ships' Anchor Chain

GENERAL SALES OFFICE: Grand Central Terminal New York City

DISTRICT SALES OFFICES: Boston, Chicago, Philadelphia, Pittsburg, Portland, Ore., San Francisco

BROWN BROTHERS & CO.

Established 1818

Philadelphia NEW YORK Boston

TRAVELERS' LETTERS OF CREDIT

Travelers' Letters of Credit have been issued by us for over 75 years and are favorably known to the tourist and business man in all parts of the world. They are an introduction to bankers of high standing, authorizing them to furnish against drafts on Brown Brothers & Co., or Brown, Shipley & Co., such funds as may be required up to the amount fixed in the Letter. Issued in dollars or in sterling. At 123 Pall Mall, London, fully equipped offices are maintained for the convenience of our clients.

A CENTURY OF SERVICE

BROWN, SHIPLEY & COMPANY

Established 1810

Founders Court, Lothbury
London, E. C.

Office for Travelers
123 PALL MALL, LONDON, S. W.

ESTABLISHED 1865

TO NET 8%

A First-Mortgage Bond of Unusual Merit

Security ample and of a readily realizable character.

Prompt payment of principal and interest guaranteed by contracts.

Maturities 1 to 6½ years and denominations $500 and $1,000.

This investment is of the same type and quality as similar securities which we have handled for years on a 5% to 6% basis.

Send for Circular No. 1060D

Peabody, Houghteling & Co.

Est. 1865—Inc. 1918
10 South La Salle St., Chicago

Branches: Detroit, Cleveland, St. Louis, Milwaukee

ESTABLISHED 1865

Bring Order out of Disorder

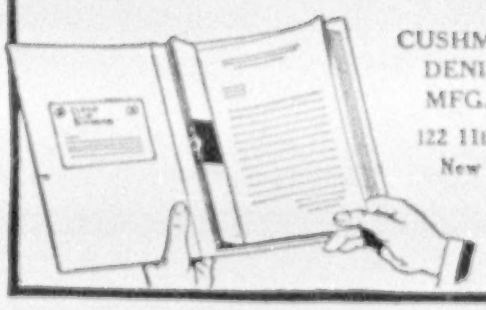
with "CLEKO" Clip Binders

Make a book-file of the important "live" correspondence.

"Cleko" Clip Binders hold papers in readable form, and systematize your desk. No holes to punch. Papers easily inserted and removed.

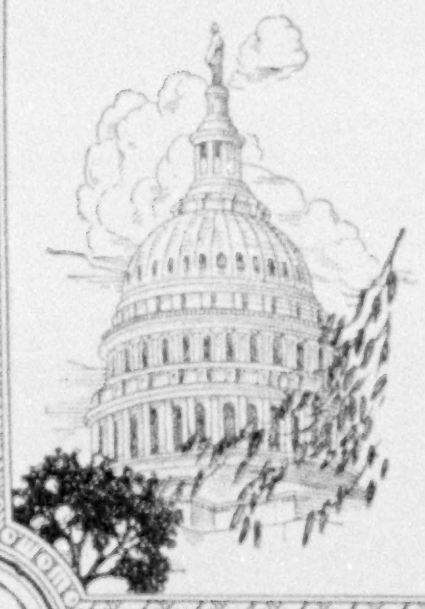
No. 311 Note size (6 x 9¼)	25c each
No. 314 Letter size (11 x 8½)	35c "
No. 317 Legal size (8½ x 14)	40c "
No. 414 Black cloth (11 x 8½)	$1.25 "

Your stationer has them. If not, write us.



CUSHMAN & DENISON MFG. CO.
122 11th Ave., New York

Fifty-One Years Without Loss to an Investor



WASHINGTON enjoys age-old traditions of permanency and steadiness which have strong attractions for the conservative investor who has seen the value of his securities shrink elsewhere. Our record of more than half a century of service without loss to a client is in accord with the conservatism and stability which surround property values at the seat of the Government.

Our 6% First Mortgage Notes should appeal to you because they are safe, offer a liberal return and are at par every day in the year.

Write for detailed information

SWARTZELL, RHEEM & HENSEY CO.
SEVEN TWENTY NINE, FIFTEENTH STREET
Washington, D.C.

6%

Six Per Cent and Safety

For 25 years we have paid 6% on TIME CERTIFICATES which are fully protected by first mortgage, always worth 100 cents on the dollar and readily cashed.
Any one who has saved $25 or more will be interested in knowing all about this old, reliable institution.

Write for our booklet
"6% AND SAFETY"

The Calvert Mortgage Company
877 Calvert Building BALTIMORE, MD.

When Youngsters Weary of Play on Hot Days

The wise Mother goes to her secret drawer, and the next moment they are quiet as mice, poring over the 200 color and half-tone *pictures* in **Scenes from Every Land,** or engrossed in the 144 wonder *pictures* and fact-stories of the **Pictorial Geography** on separate sturdy sheets. Six dollars thus invested brings these two prime aids to restless little minds. Illustrated circular on request.

Obtainable only from
NATIONAL GEOGRAPHIC SOCIETY
WASHINGTON, D. C.

Six Per Cent Plus

"I WOULD rather get six per cent, plus satisfaction and peace of mind," writes one of our customers, "than take a chance to get a higher rate with constant worry, trouble and the possibility of loss."

The bonds safeguarded under the *Straus Plan* meet this demand. They net six per cent plus—plus 100% and safety, plus thorough investment service, plus satisfaction and peace of mind, plus 4% Federal Income Tax paid. Write today for our Current Investment Guide, which describes a diversified selection of these sound bonds. Ask for

CIRCULAR H-1008

S.W. STRAUS & CO.

Established 1882 Incorporated
150 Broadway Straus Building
New York Chicago

Offices in Fifteen Principal Cities

First-Mortgage Bonds Exclusively
38 Years Without Loss to Any Investor

COPYRIGHT 1920 BY THE PROCTER & GAMBLE CO. CINCINNATI

RIGHTLY trained, the unconscious vanity of a little miss becomes the ingrained personal daintiness which is priceless to a woman.

Teach her that it is the frequent, regular use of Ivory Soap which gives her the lustrous hair, the clear, smooth skin, and the spotless garments which she innocently admires.

Thus it is easy to imbue a child with that love of cleanliness which is the basis of all enduring charm.

Send for Free Sample of the new Ivory Soap Flakes

—snowlike, instant-melting flakes of genuine Ivory Soap that launder silks, chiffons, flannels, knitted garments, and all fine fabrics like new, without rubbing. For generous trial package, just send your name and address to Department 23-I, The Procter & Gamble Co., Cincinnati, O.

IVORY SOAP . . . IVORY IT FLOATS . . . 99 44/100 % PURE

VOL. XXXVIII, No. 2 WASHINGTON AUGUST, 1920

THE NATIONAL GEOGRAPHIC MAGAZINE

COPYRIGHT, 1920, BY NATIONAL GEOGRAPHIC SOCIETY, WASHINGTON, D. C.

ANTIOCH THE GLORIOUS

By William H. Hall

Author of "Under the Heel of the Turk"

IF THE land of the Garden of Eden is half so fertile and well watered today as it was in the time of its first occupants, its possession is well worth the hardships of a long and difficult military campaign. When the British Army entered the city of Bagdad, in the spring of 1917, Eden was won and made a part of the British Empire.

For the production of cotton, corn, and dates, the Valley of Mesopotamia is unsurpassed, and, according to all calculations, it is still capable of supporting a population of fifty millions, whose main occupation would be the cultivation of the soil and the preparation of the abundant products of this most wonderfully fertile region for the markets of the world. Some of the products of this valley go out by way of the Persian Gulf and are consumed in India, but by far the greater portion will eventually go westward, to supply the looms of Europe or to feed and clothe her industrial millions.

FORTUNE'S WHEEL TURNS TO ANTIOCH ONCE MORE

The natural outlet for all this wealth is not the long haul over the Bagdad Railway to Smyrna and Constantinople, some 1,500 miles, but the short haul, past the city of Aleppo, to some harbor of the Mediterranean coast—Alexandretta, where the great Macedonian brought final defeat to the Persian hordes, or to the ancient harbor of Seleucia, seaport of the city of Antioch.

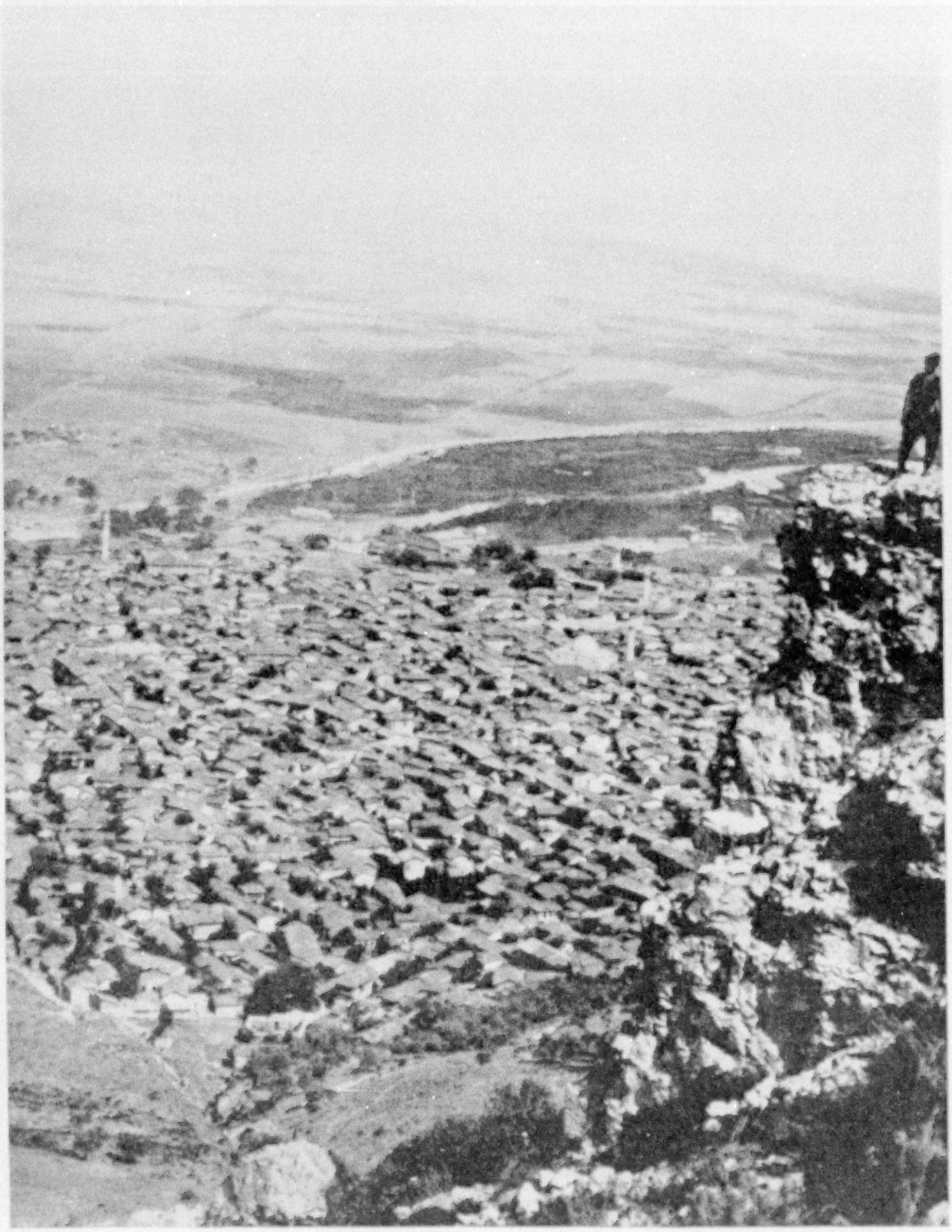
For a thousand years Antioch was the capital city that ruled the industries, trade, and commerce of the Euphrates and Tigris valleys. And now the turn of Fortune's wheel is again about to direct the stream of trade past her doors.

While this is being written a large force of Arab and Turkish Nationalists is lying behind the ancient walls of Justinian that surround the modern city of Antioch. Within the city a little force of some 500 French soldiers is holding back the besiegers.

In the days of its glory the people of Antioch were gathered in the great theater listening to a famous actress while the Persians were besieging the city. They trusted to their splendid fortifications and feared naught. At a point in the play the actress paused, while, with arm outstretched toward the mountain above the city, she exclaimed, "Behold, the Persians are come!" There was great applause, the audience thinking it a fine bit of stage play; but as a shower of arrows darkened the sky, the people turned to behold that instead of play it was reality. The enemy was within the walls, and plunder and destruction had already begun.

THE CITY OF BEN HUR'S TRIUMPH

When we read the story of Ben Hur and follow him about the streets of that splendid city, or enter with him the palaces of the rich, or see Messala gaming with his friends in the magnificent palace



Photograph by American Colony, Jerusalem

A VIEW OF MODERN ANTIOCH FROM MOUNT SILPIUS

In the middle background winds the silver thread of the Orontes River. Beyond stretch the fertile plains for many miles toward the Amanus range of mountains.

on the island in the Orontes, or watch with breathless interest as the hero guides the four fleet Arab steeds through the mazes of the chariot race, Antioch seems a fabled city of ancient times, living in story only.

It is hard to come to reality and think of American Fords and Italian Fiats rushing along the roads where Ben Hur guided his matchless Arab steeds, or of great motor lorries trundling across the plain where the long trains of camels brought their caravans of riches from the East. The hippodrome where Ben Hur, the Jew, contested with Messala, the Roman, is in ruins, but the East and the West are just as surely in conflict today.

The purpose of this story is to place again before the reader a city that has been the capital of the Nearer East, and that in the near future may again become a controlling factor in the trade of the Levant. It is the story of *Antioch the Glorious.*

SELEUCUS VISITS A SHRINE ON MOUNT CASIUS

Fleeing for his life across the Syrian Desert, with scarcely fifty horsemen at his back, was not an auspicious opening for a young man ambitious to found a kingdom of his own. But such is the picture of Seleucus Nicator, favorite of Alexander the Great, commander of the Macedonian Horse, Governor of Babylon, and finally head of the House of Seleucus, which for nearly three hundred years ruled an empire stretching at times from India to the Ægean Sea.

The break up of Alexander's empire brought two decades of strife, resulting in the emergence of four great divisions—Egypt at the south, Macedonia and Greece to the west, Asia Minor in the north, and Syria, with Mesopotamia, in the center and east. Victory at the Battle of Ipsus, in 301 B. C., gave Seleucus control over this Syrian kingdom.

Almost the first act of Seleucus after his victory was to proceed to a sacred shrine on the summit of Mount Casius, and there offer sacrifices of thanksgiving to Zeus.

Of all the splendid mountains in Syria, none is more beautiful, more dignified, more mysterious, than Mount Casius of the ancients, Jebal Akra of the Arabs, Bald Mountain as it would be in simple English. From whatever side it is viewed, it is a regular cone, 6,000 feet in height, so steep that it can be ascended only from the eastern side, and then with difficulty. From its summit to the sea on the west and the Orontes River on the north, the sides are so unbroken by foothills and valleys that it seems as if a boulder started at the top would roll without hindrance to the sea.

To the mariner steering for the harbor of Seleucia, and from the plains to the east, even from the city of Aleppo, 70 miles away, the splendid conical peak is a guiding landmark.

It is no wonder, then, that this mountain was looked upon as the home of the gods. Often gossamer white clouds veil its summit with the mystery befitting an abode of those divine. Again, the dark storm-clouds gather, the thunders roll, and Jupiter launches his thunderbolts of anger from his throne on high. When the lights and shadows play over the rugged slopes and the sun glows warm on the mountain side, the gods are at peace and all the world is gay.

A FLIGHT OF BIRDS DETERMINED THE LOCATION OF SELEUCIA

Following his religious devotions on Mount Casius, the flight of a flock of birds guided the victorious Seleucus to the founding of a Mediterranean seaport for his new kingdom. This city of Seleucia became large and flourishing, with a harbor protected by artificial breakwaters and a large inclosed basin, where the Greek and Roman galleys could load and unload directly at the wharves.

From this harbor, in later years, the Apostles Barnabas and Saul sailed away to bear their gospel message to the Roman world.

The ancient breakwaters, the rock citadel guarding the harbor entrance, and the outlines of the inner basin can still be traced. This same site was surveyed recently by an American syndicate as a possible location for a port and the terminus of a railway from Asia Minor to the Mediterranean, tapping the rich mineral regions of the interior.

XUM

Photograph by Maynard Owen Williams

THE WATERS OF DAPHNE

High banks of moss and ferns, with the streams of water spread out in lace-like falls, give to the place a deliciously cool and refreshing aspect. It was within sound of these waters that the ancients were accustomed to celebrate the Feast of Fertility, which eventually degenerated into such immoral revels that Rome herself was scandalized.

It was quite the fashion in ancient days for a conqueror to commemorate his victories by the building of cities. In this particular Seleucus seems to have excelled. He is said to have founded, in all, nine cities named for himself, Seleucia; sixteen named for his father's family, Antioch; six for his mother, Laodicea; and three named Apamea for his Persian princess, given him as bride by Alexander.

Four of these cities were in northern Syria and became the center of the great Seleucid Empire. Antioch of Syria, beside the Orontes River, twenty miles from the sea, was the capital; Seleucia, at the foot of a rocky headland, a short distance north of the Orontes, was Antioch's seaport; Laodicea, south of Mount Casius, a flourishing coast city, and for a time replacing Antioch itself as the seat of the Roman Government; and Apamea, on the Orontes near Hama, was the great military training camp.

At Apamea, Seleucus placed the 500 elephants he had brought from India, and here, at one time, he assembled 30,000 mares and 300 blooded stallions.

But by far the most famous of all these cities was Syrian Antioch, the capital, which came to be spoken of as "Antioch the Glorious," "The Eye of the Orient," "The Gate of the East." And through this gate there flowed eastward the great tide of Greek art and civilization and Roman law.

According to the Roman reformer and satirist, Juvenal, from Antioch also "the waters of the Orontes overflowed into the Tiber," and thence came superstitions and indulgences and excesses that caused the corruption of Rome. This may be true, but also it was "in Antioch that the disciples were first called Christians."

AN EAGLE DIRECTED SELEUCUS TO THE SITE OF ANTIOCH

While engaged in offering sacrifices in the city of Antigonia, the capital of

Seleucus' conquered rival, an eagle swooped down, caught a piece of meat from the altar, and flew away. The flight of the eagle was watched, and it was seen to settle upon Mount Silpius, at the southern edge of the plain, beside the Orontes. This was interpreted as an omen that the gods wished Seleucus to found his capital on the site indicated by the eagle's flight.

Accordingly, Seleucus destroyed Antigonia and removed city and citizens across the plain to the new location. It was undoubtedly a great asset to have his judgment as to a suitable and strategic site confirmed by signs and omens.

And so Seleucus was guided to build his capital city on the rising ground between the Orontes River and the high slopes of Silpius. This plateau is some two miles in width and extends a long distance east and west between the river and the mountains. To the north of the river a wide and fertile plain stretches away for miles to the range of Amanus; the Lake of Antioch, surrounded by the greenest of plains, lies blue in the distance.

Photograph from William H. Hall

IN THE COINS OF ANCIENT ANTIOCH IS RECORDED MUCH OF THE PROUD CITY'S LEGENDARY HISTORY

At the top is shown *Fortuna*, symbolic figure of the city, seated on the crags of Mount Silpius, with the Orontes River, represented as a boy, swimming at her feet. In the middle is a coin of the time of Antiochus Epiphanes, who persecuted the Jews and against whom the Maccabees rose. It shows the figure of Zeus, and the inscription claims divine honors for Epiphanes. At the bottom is one of the coins of Antiochus the Great, showing the head of Antiochus on the obverse and on the reverse side Apollo, patron god of Antioch, aiming an arrow into the ground (see text, page 99).

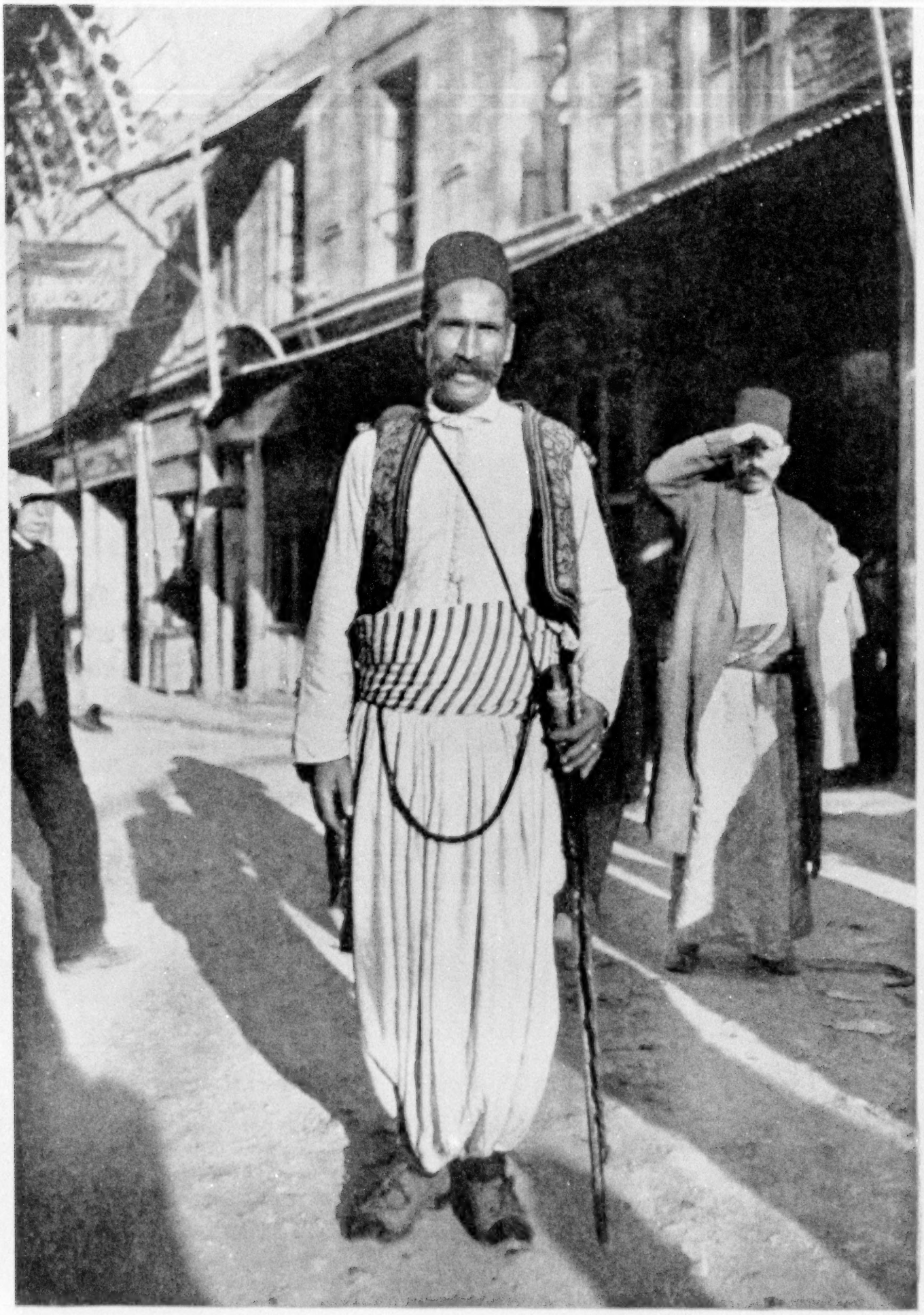
This was a strategic point for the building of a capital city. The immediate environs furnished ample support in grain and cattle for the city's needs. Both by river and easy road there was access to the sea. Almost within sight from the citadel walls the pass of the "Syrian Gates" gave access to the north and west.

The whole plain of the Mesopotamian Valley lay open to the east, and southward along the seacoast and the plain between the Lebanon and Anti-Lebanon ranges opened the land of Syria and the way to Egypt.

From three directions, therefore, the

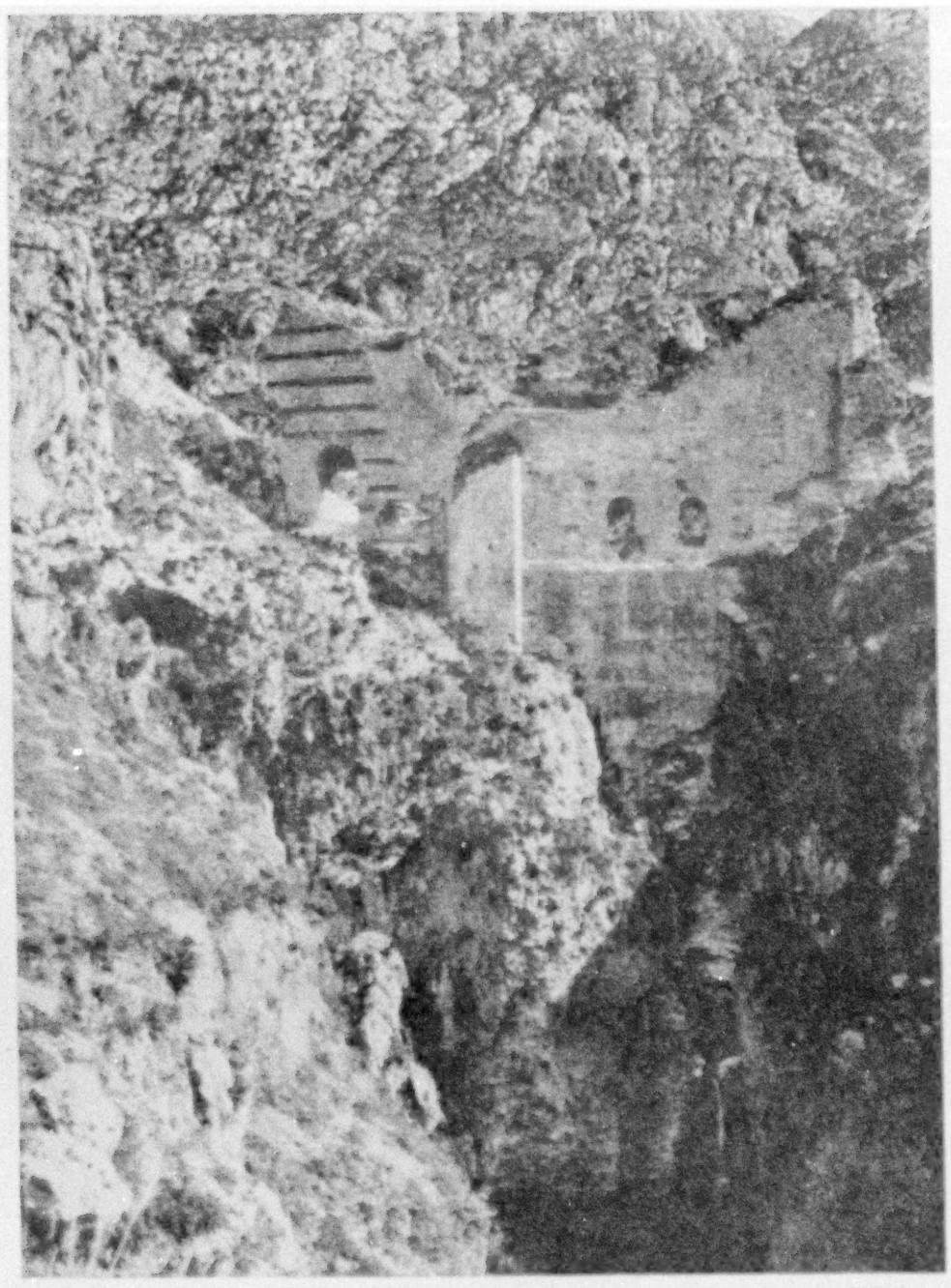
© Keystone View Company

YOUNG SYRIAN WOMEN OF THE TYPE THE TRAVELER MEETS IN ANTIOCH TODAY



Photograph by Charles E. Beury

A NATIVE COURIER FOR AN AMERICAN CONSUL IN SYRIA



Photograph by Maynard Owen Williams

BAB-EL-HADID, ONE OF THE LESSER GATES OF ANTIOCH

Down the side of this valley the city wall descends almost perpendicularly.

whole empire centered on this point. It was the natural meeting place, the crossroads of trade and government and military expeditions. Rome recognized this and made Antioch her seat of government for the Orient, and there she fitted out all of her armies for the Eastern campaigns.

ANTIOCH REPRESENTED BY "FORTUNE"

Modern trade has borne out the judgment of the ancients by maintaining the commercial importance of the near-by city of Aleppo.

Thus Seleucus chose the place for his capital city whence he could easily strike north, south, or east, and so located that he prevented the union of his rivals. His was the power of "the Central Empire."

On many of the coins of Antioch is stamped an allegorical design representing the city. This design is a crowned maiden seated upon the rocks, with a boy, in the attitude of swimming, at her feet. This is the city of Antioch, on the rocky mountain of Silpius, with the river Orontes at its feet. The figure of a maiden was the city's "Fortune," and this statue occupied one of the most important places in the decoration of the capital.

A CITY OF FOUR PARTS

About fifteen miles to the east of Antioch the Orontes River makes a sharp bend to the west. After flowing across the broad, fertile plain, it is joined by the Black River, the outlet of the Lake of Antioch. The union of these two streams and the numerous smaller tributaries from the neighboring mountains makes a fine, broad river that flows with a rapid current almost straight westward to the sea.

Just north of Mount Silpius there is a broad bend inclosing an island. It is possible that the island was made originally by a canal cut across the bend. Seleucus built his city on the rising ground immediately south of the river.

Mention is made by the geographer Strabo that the city was of four parts—the original city of Seleucus; the city on the island built by Antiochus I; the portion between the first city and the moun-

tain, built by Antiochus III, and the most beautiful portion to the east, built by Antiochus Epiphanes. During the Seleucid era the city covered a space four miles long by two miles wide. In addition, there were populous suburbs, such as Heraclea and Daphne.

The general plan adopted in building was one much admired at that time. There was one long main street, in general parallel with the river. All other streets were either parallel with this main street or at right angles to it. This "checker-board" plan was typical of Greek cities.

Bridges spanned the river both to the island and to the northern bank. The points of the mountain were crowned with temples, shrines, and a citadel.

The whole city was surrounded by a great wall which is said to have been seventy to eighty feet high, to have been protected by 360 towers, and to have been so broad that a team of four horses could drive abreast on the top of it.

It is thought by some that this plan of Antioch, especially the great colonnaded street, was copied in the planning of other cities, such as Palmyra and Jerash. Indeed, Müller in his "Antiquities of Antioch" contends that Antioch was an original product of Greek art, that other cities were patterned after it, and that later decorations of Antioch were merely copies or restorations of the earlier Greek beauties by the less original Roman conquerors.

Drawn by A. H. Bumstead

A MAP OF THE EASTERN SHORES OF THE MEDITERRANEAN

Legendary history tells us that the flight of an eagle indicated to Seleucus Nicator the site for Antioch, which became the brilliant capital of the Seleucid Empire. It enjoys an unrivaled situation on the south bank of the Orontes River, with a spur from Mount Casius at its back and fertile plains spreading northward beyond the river in the direction of Alexandretta.

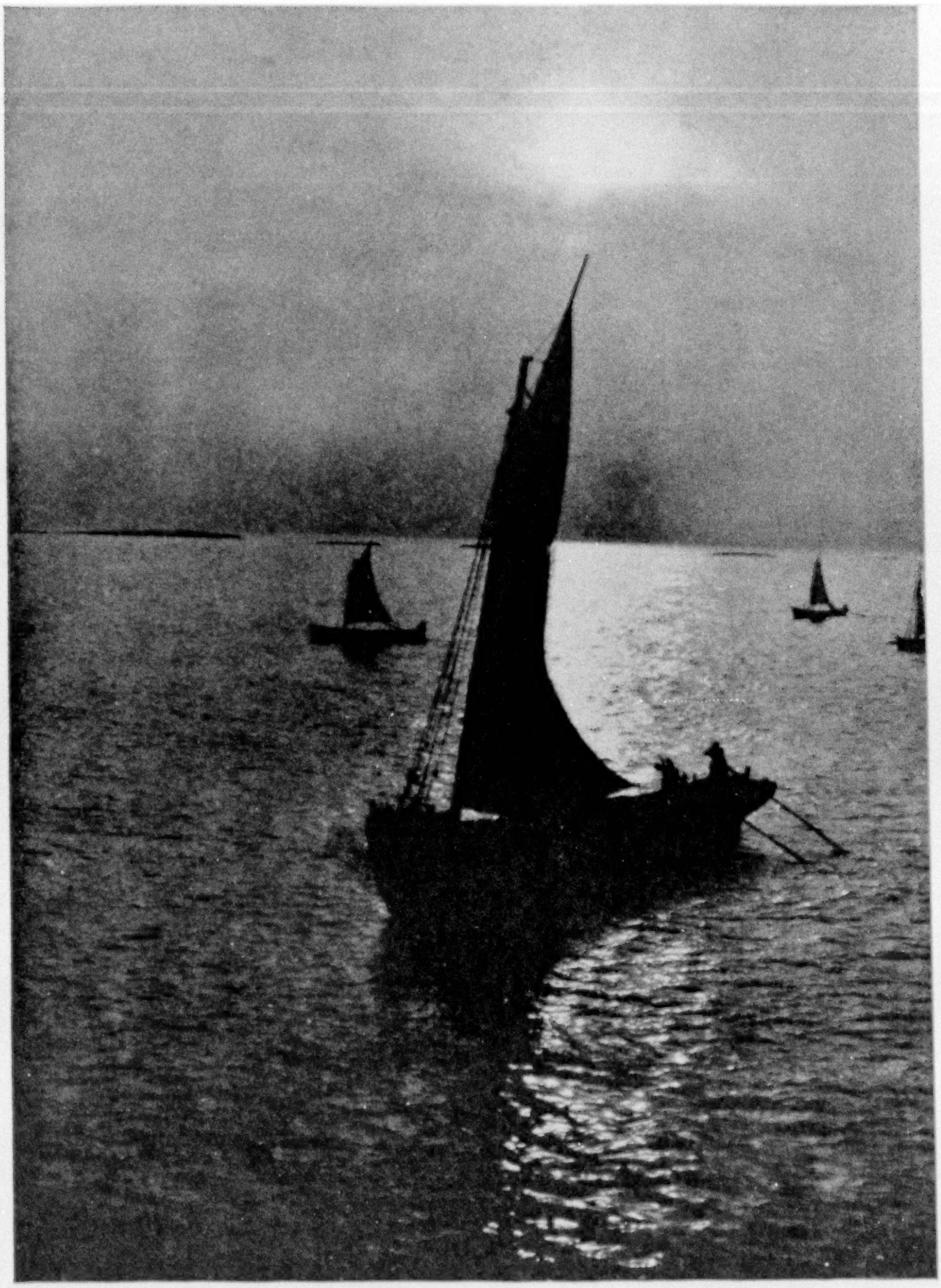
A STREET OF MAGNIFICENT SPLENDOR

The most magnificent splendor of Antioch was its great street. This ran straight through the city from east to west. At each end there was an impressive gate. The eastern gate was later known as the "Gate of St. Paul." It was still standing forty years ago, almost complete; but now even the foundations have been removed for buildings in the modern city. The western, or Daphnean Gate, was called the "Gate of the Cherubim," for over this gate Titus placed the golden cherubim he had taken from the temple in Jerusalem.

These two gates were about four miles apart. Between them was a grand boulevard.

One who has visited the ruins of Jerash, east of the Jordan, or Palmyra, or the beautiful white marble street of Ephesus, can form some conception of what this glory of Antioch must have been.

On each side of the street was a double row of columns. The outside aisle in each case was roofed over, furnishing a shady



Photograph by Maynard Owen Williams

SUNSET IN THE BAY OF ALEXANDRETTA

The natural outlet for the products of the wonderfully fertile valleys of the Tigris and the Euphrates is not the long haul over the Bagdad Railway to Smyrna and Constantinople, but the short haul, past the city of Aleppo, to some harbor on the Mediterranean coast—to Alexandretta, 30 miles north of Antioch, or to Antioch's resuscitated seaport, ancient Seleucia.

walk in summer and a dry and sheltered way during the winter storms. Between the inner rows of columns was a broad highway for chariots and horsemen. It has been estimated that if these columns were the same distance from each other as those still standing in the street of Palmyra, there would have been 6,800 in all.

This street was lined with magnificent public buildings, temples, shrines, and palaces of the nobles.

Imagine, then, this grand highway, with its long vista of granite, marble, and porphyry columns, its covered promenade rich in statues and carvings, its marble pavements, its beautiful Grecian architecture, and, terminating all, the golden decorations of the western gate blazing in the light of the setting sun.

A STREET OF GAY THRONGS AND BRILLIANT PROCESSIONS

Fill this street with its busy throngs of men and women: Here a religious procession, the priests clad in the many-colored vestments of their office, the animal for sacrifice decked with wreaths and garlands of flowers, and the company of singers chanting the solemn processional; there a gay throng of revelers in wedding procession, escorting the bridal pair to the beautiful Nymphæum, near the river side, a great circular, dome-covered building, rich in columns and statues, and with cool, plashing fountains—an institution with special accommodations for the celebration of nuptials; or, again, down the great street there might come some victorious general, returning in triumph from his foreign campaign—slaves, soldiers, sovereigns, all following his triumphal car. Thus came the great Cæsar himself, while the city resounded again and again to cries of loyalty and adoration.

Up and down this street have passed not only the stately religious procession, the happy bridal party, the triumphant conqueror, and the magnificent array of the glorious king, but also there has rushed the mob, wild with fury and drunk with the passion of plunder and massacre. O great street of Antioch, what scenes of splendor, pleasure, and of horror have been enacted on those marble pavements from gate to gate, and have woven their web in and out among that forest of columns!

Many other streets crossed the great street, always at right angles, and at every intersection arches were erected, called "tetrapyli."

About the middle of the city another broad street, also colonnaded, extended from the river to the mountain. In this street, near the river, was located the Nymphæum, mentioned previously, and where it crossed the great street was created the "Omphalos."

This altar was the center of the city and was devised in imitation of that at Delphi, which had been erected by the ancient Greeks, supposing Delphi to be the center of the world. Here was a sitting statue of Apollo, the patron god of the Seleucids.

Outside the eastern gate for a distance of two miles King Herod of the Jews built a continuation of the great street.

Herod's street also had rows of columns and was paved with marble. It traversed the portion of the city known as Herod's Suburb.

From the western or Daphne Gate, a great highway extended for some six or eight miles through the suburb of Heraclea to the noted Grove of Daphne. This road skirted the low foothills. At frequent intervals there were fountains, and on both sides were the magnificent villas of the nobility of Antioch.

ANTIOCH HAD ITS GAY WHITE WAY

"At night the streets were brilliantly illumined by lights rivaling the light of day. This was one of the splendors of the city. The Antiochæans turned night into day, not looking for security, but pleasure. Night became a part of day, and the most beautiful part. Especially were the baths and the approaches thereto illumined." From this description one might imagine himself reading of our twentieth century Gay White Way, with its myriad electric lights.

An abundance of splendid water contributed to the joy and pleasures of the Seleucid capital. Not only was there the river Orontes, but great aqueducts brought a copious supply of clear, pure water from the mountains. Two large aqueducts entered the city from the east

XUM

© Keystone View Company

THE HARBOR OF BEIRUT, ONE OF THE SYRIAN PORTS WHICH HAS CAPTURED THE COMMERCE ONCE CONTROLLED BY SELEUCIA

Lying 170 miles south of Antioch, Beirut is connected by rail with Aleppo, Damascus, and Tripoli. It is the seat of the Syrian Protestant College, an undenominational American institution with faculties of arts and medicine, pharmacy and commerce, attended by more than 1,000 students.

and a greater number from the west, bringing the waters of Daphne to the gardens, fountains, and baths of the city.

Antioch was everywhere beautified with statues in marble and bronze. It was the delight of the great who visited the place to erect a statue, to dedicate a shrine, to build an aqueduct, or present a bath. It is said that there were so many public buildings in the city that the poorer people had to live outside the walls or in one of the suburbs.

The size of the city was 30 by 36 stadia, equal to 3½ by 4 miles. St. Chrysostom gives the population as 200,000, which number did not include boys, girls, or slaves. It is, therefore, safe to say that Antioch, with its immediate suburbs, was a city of half a million people.

"THE MOST DELIGHTFUL PLACE OF THE WHOLE EARTH"

Passing through the city gate at the western end of the great street, one follows the road through the suburb of Heraclea. This road follows the turnings of the foothills. High on the left rise the rugged mountains. Sloping away on the right are green fields, beyond which winds the Orontes. This road was once lined with beautiful gardens surrounding splendid villas, and kept fresh and flowering by abundant streams of water from the neighboring hills. At frequent intervals there were bubbling fountains, inviting the thirsty to refresh themselves, and wayside shrines, where the weary could rest and the devout could pay their devotions.

Heraclea itself must have been a beautiful suburb, located on rising ground, well supplied with water, and possessing a splendid view of the river valley and the surrounding mountains. One did not stop at Heraclea long, however, but hastened on through rich gardens, past fine houses and villas, to the wonderful Valley of Daphne.

This valley is about six miles from Antioch. Ancient writers, praising its beauty, called it "the most delightful place of the whole earth," "the pleasantest corner in the earth," and "the garden of Venus and the graces." A narrow valley, descending between two high, rocky mountains, broadens out into a fine plateau, at a point where beautiful streams of clear, cold water break forth from the rocks. These fall in a series of cascades into the gorge below, where they unite into a torrent rushing away to the Orontes.

In the floor of this valley are numerous little wooded islands, with green and grassy shores. High banks of moss and ferns, with the streams of water spread out in lace-like falls, give to the place a deliciously cool and refreshing aspect.

In former days the mountain sides were covered with forests, the plateau was adorned with groves of cypress, and the narrow valley was green with clumps of laurel.

The Valley of Daphne is beautiful today in its abundance of water and its wild tangle of moss and fern and overrunning vines. But "the pleasantest corner in the earth" it must have been when it was all in the order of a great wild garden, graced with beautiful temples, peopled with nymphs and dryads, and veiled in the poetic mystery of Greek religious fancy.

There has been some dispute as to the location of Daphne; but to one who has visited the place there can be no doubt. The beauties of the valley itself are unrivaled, and the ruins on every hand would seem to mark the place beyond question.

At the very fountain head are the ruins of some great building, perhaps the temple of Apollo. From this point a number of aqueducts lead away in the direction of Antioch.

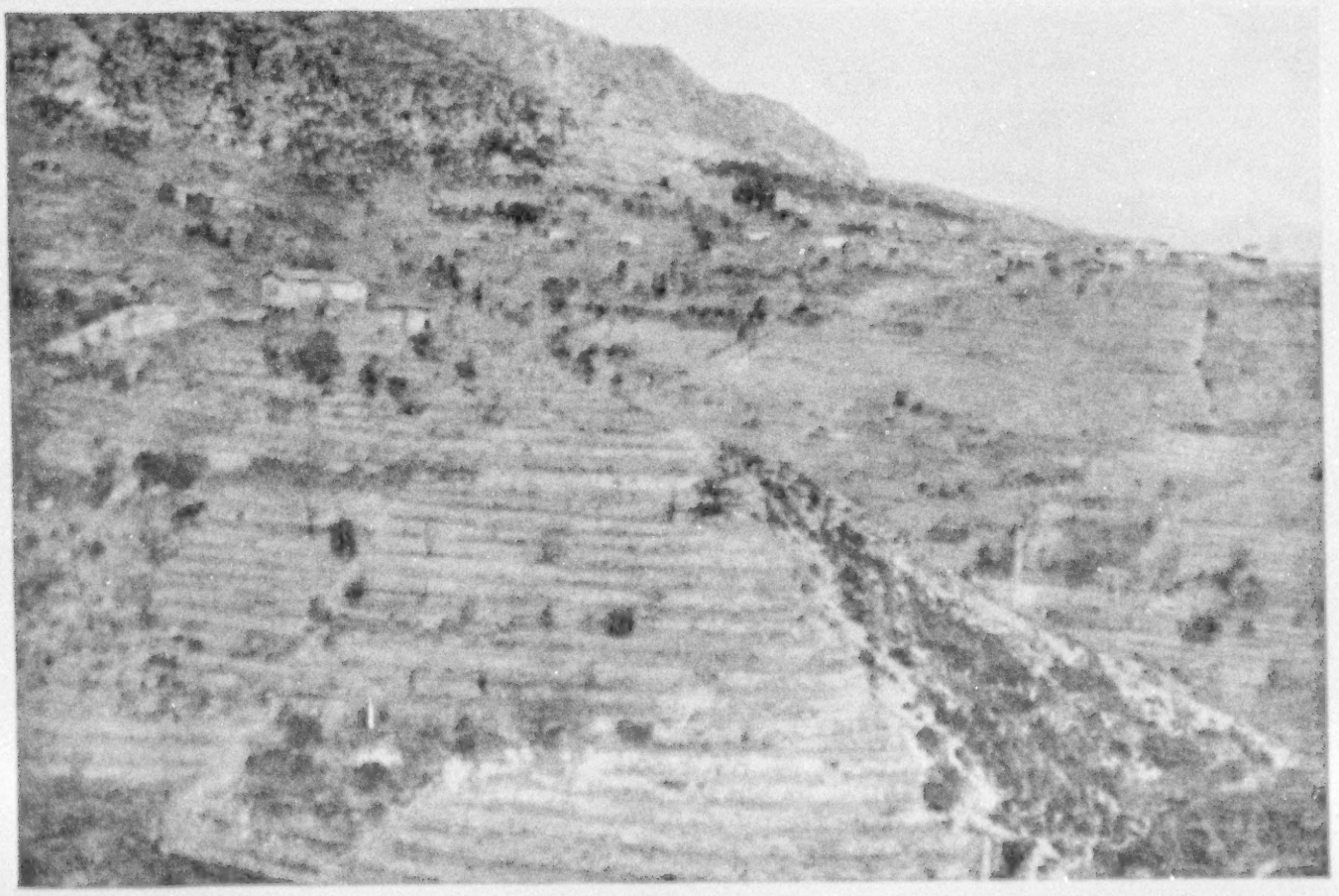
The whole plateau is strewn with broken pieces of marble richly carved; granite columns are everywhere, projecting from the fields or built into the garden walls. The peasants' houses are adorned with marble scrolls, ancient keystones, or broken bits of decoration from ancient palaces. One cannot but speculate as to what lies buried a few feet under the soil. But the heathen temples were destroyed with fire in Christian times, and terrible earthquakes long ago reduced the magnificent buildings to heaps of ruins.

What a show-place Daphne must have been in its prime! Apollo was the brother of Diana, the goddess of the chase, who

XUM

THE MARKET-PLACE OF MODERN ANTIOCH

Although it played a major rôle in the early history of Christianity and it was here that "the disciples were first called Christians," Mohammedanism is now the dominant faith of this region, as the minaret overlooking the market suggests.



Photographs by Stephen Van R. Trowbridge

HILLSIDES NEAR ANTIOCH TERRACED FOR THE CULTIVATION OF MULBERRY TREES

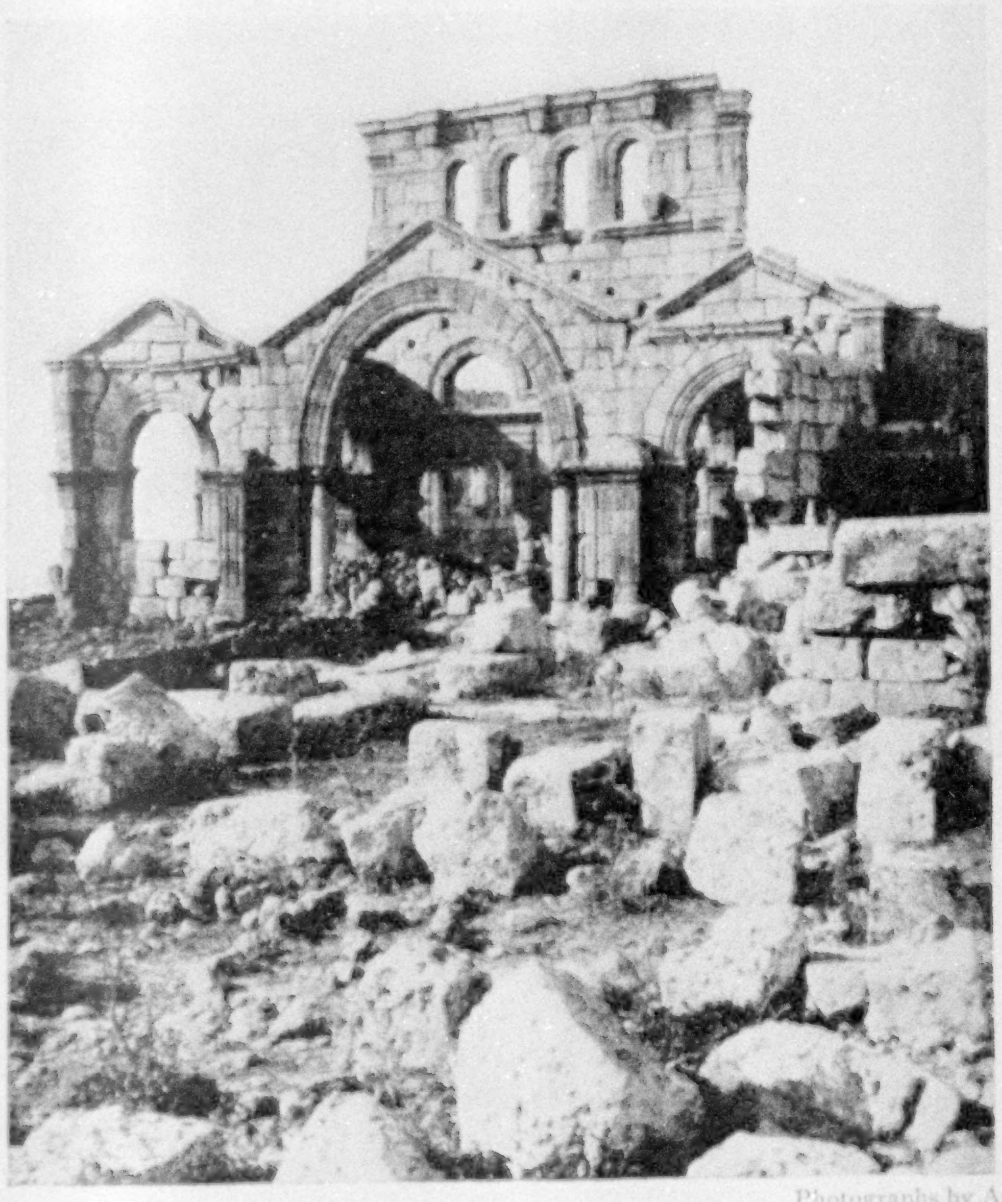
RUINS OF A CHURCH ON "JABEL SIMAN," PROBABLY THE BIRTHPLACE OF THE ORDER OF PILLAR SAINTS

Note the outline of Mount Casius in the background.

Photographs by Maynard Owen Williams

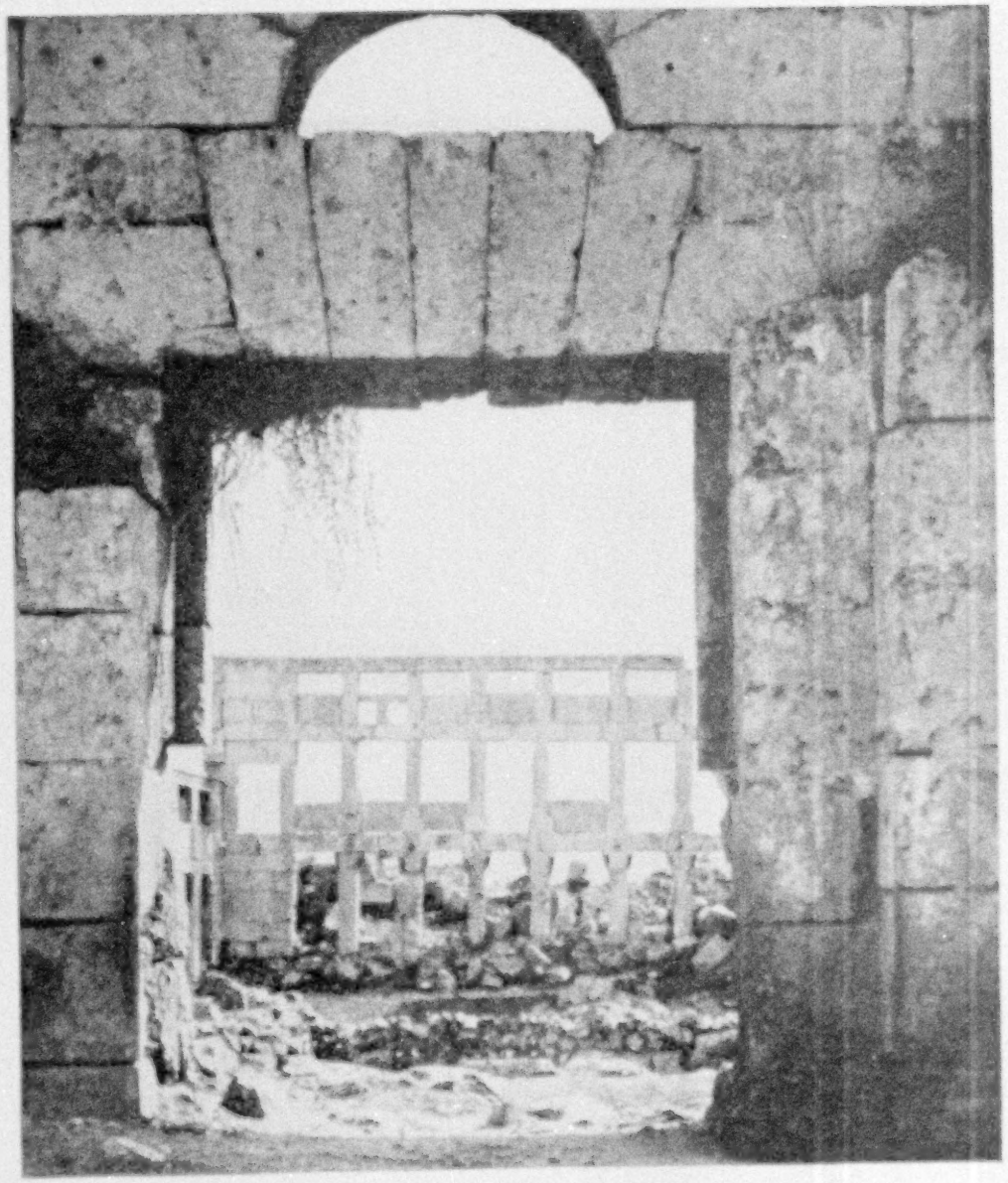
THE HARBOR OF SELEUCIA, SHOWING THE ANCIENT BREAKWATER, NOW BURIED IN SAND

From this harbor Barnabas and Saul set sail on their missionary journeys. The city was of great importance in the struggle between the Seleucids and the Ptolemies. It stood on the rocks overlooking the sea, four miles north of the mouth of the Orontes.



RUINS OF THE CHURCH OF ST. SIMEON STYLITES, NEAR ANTIOCH

Simeon was the first and most famous of a group of religious zealots known as Pillar-hermits. He built a pillar six feet high and began to live upon it. From time to time he built new pillars, each succeeding column higher than the previous one, until finally he was residing sixty feet in air. On this last pillar he lived for thirty years without once descending to the ground. His followers used a ladder to take to him the necessaries of life.



Photographs by American Colony, Jerusalem

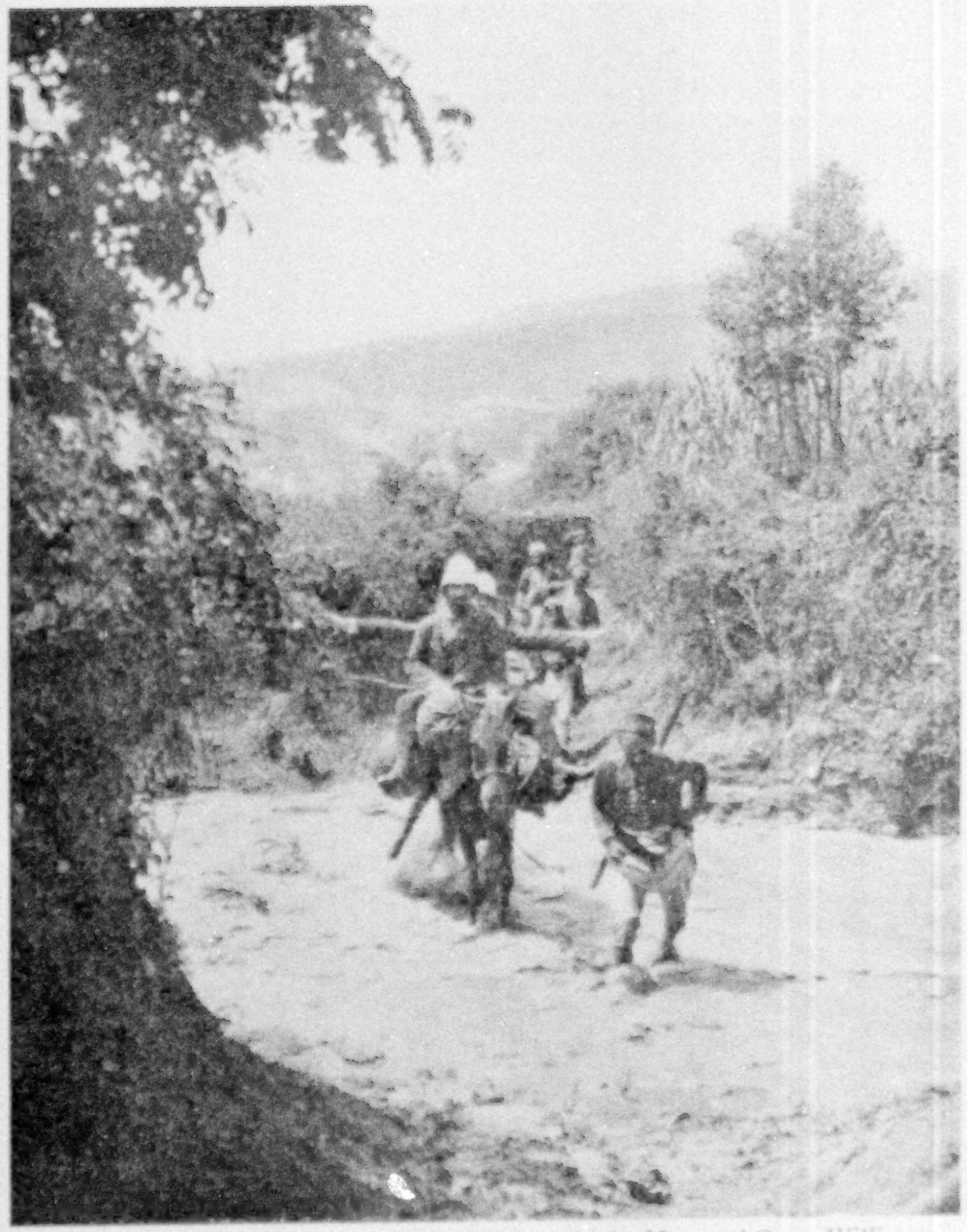
THE DOORWAY OF THE MONASTERY OF ST. SIMEON STYLITES

This monastery was the center of the order of the Pillar-hermits. At the age of thirty, Simeon was expelled from one monastery on account of his excessive austerity. It was then that he began his life on top of a pillar, from which he preached daily, exercising great influence over the populace, converting many heathen to Christianity, and taking an active part in ecclesiastical politics. At his death his body was removed to Antioch and his grave became a shrine.

Photograph by American Colony, Jerusalem

LICORICE ROOT BEING MADE READY FOR EXPORT TO AMERICA

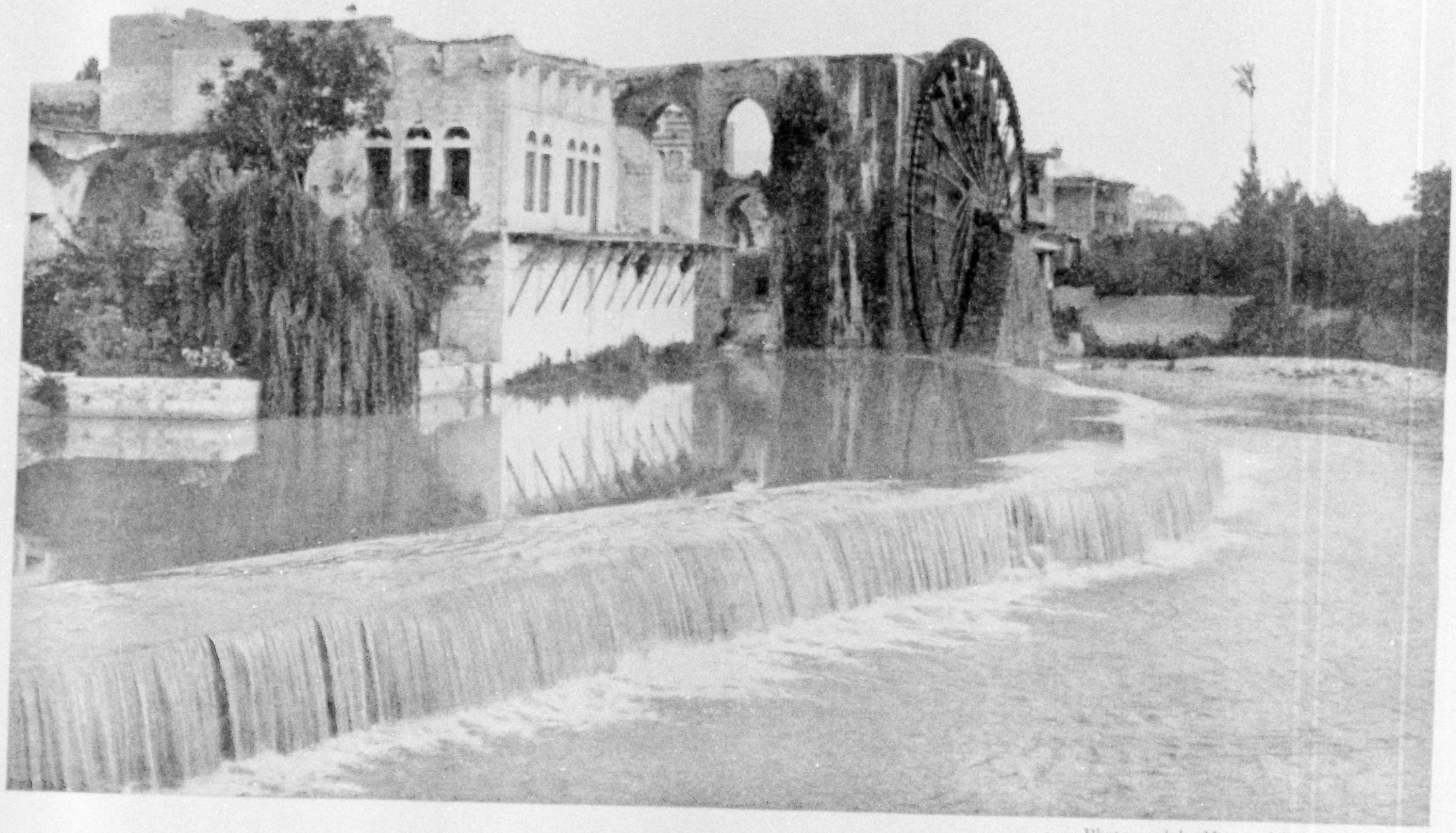
Once a gay, glittering, sin-sated city, starting point of many of Rome's most important military expeditions in the Near East, and the third city in the world in point of size, Antioch today digs licorice roots as one of its chief means of livelihood.



Photograph by Maynard Owen Williams

CROSSING A STREAM AT THE FOOT OF MOUNT SILPIUS

Strabo, the geographer, gave to Antioch the name of Tetrapolis because of the four parts of the city, each surrounded by its own wall. The citadel crowned Mount Silpius, the last eastern spur of Mount Casius.



Photograph by Maynard Owen Williams

A WATER-WHEEL AT HAMA, ON THE ORONTES, SOUTH OF ANTIOCH

These ponderous contrivances, some of them eighty feet in height, are used to raise water for irrigation purposes. To each paddle which turns the creaking wheel there is fastened a bucket that carries water to the top and empties it into the aqueduct. Similar wheels, constructed entirely of bamboo, are found in Chengtu, West China.

used to be attended by a bevy of beautiful maidens. This goddess and her maids loved the mountain valleys, the wooded hillsides, the springs and streams.

APOLLO'S ADVENTURE WITH THE NYMPH DAPHNE

Apollo, happening one day to be in this beautiful valley, presumably to pay a visit to his huntress sister, chanced to spy the beautiful nymph Daphne. She espied Apollo at the same instant and set off in a wild flight down the valley. Of course, Apollo followed hard. She prayed to her mother, Earth, for protection, with the result that she was changed at once into a laurel. Imagine being in pursuit of a beautiful maiden only to have one's eager arms embrace the cruel branches of a bush!

The laurel was ever after sacred to Apollo, and with its leaves he crowned the victors in the games. The valley where this incident occurred was named Daphne in honor of the nymph and was held sacred to Apollo and Diana.

When the god started in pursuit of Daphne he was so eager that he carelessly threw down the handful of arrows which he carried. From one of these arrows the golden point was broken and remained hidden in the earth until the time of Seleucus Nicator. By the pawing of the conqueror's horse this golden arrowhead was uncovered.

What finally became of this prize is not recorded; but proof of the incident is deduced on certain coins of Antioch showing Apollo aiming an arrow into the earth. At any rate, this incident caused Seleucus to build a magnificent temple to Apollo on this spot. Daphne henceforth became such a center of worship and pleasure that Antioch was at times referred to as "Antioch near Daphne."

This temple of Apollo, embowered in a cypress grove, was built with splendid columns at both front and back and with numerous columns inside. Its walls and pavements were of beautifully colored marble and the roof and ceiling were of cedar; but the chief feature of the temple was the colossal statue of Apollo, made of wood and marble. All the exposed parts of the body were of gleaming white, but the portions covered by the robe were of wood.

At the side of the statue hung a cithera, rich with gold and gems, which the god touched with the fingers of one hand, while the half-open lips seemed to breathe forth a song. The other hand held a golden saucer, from which Apollo was about to drink or to pour forth a libation to Mother Earth.

The whole statue was richly decorated and was considered one of the finest works of art in this part of the world. Just when the statue was completed is not known, but certainly not later than the time of Antiochus Epiphanes, as it appears on his coins. It was finally destroyed by fire in the reign of the Emperor Julian.

MANY EXCESSES MARKED THE FESTIVITIES AT DAPHNE

It would be difficult indeed to present an adequate account of the worship, the abuses and the excesses of this shrine of Daphne. Truly the place, in its natural surroundings and in its elaborate decorations, was beautiful beyond description.

The mountain slopes were covered with groves of cypress; the valley was green with clumps of laurel bushes; the banks were soft with grass and bright with flowers. The valley was sheltered from the winter storms, yet in the spring and summer soft breezes tempered the warmer air; and above all there was the water, splashing in fountains, foaming in picturesque cascades, rushing through a narrow gorge, quietly slipping by some little island, and always filling the air with a delightful coolness.

Add to this background of nature every fascination that the art and ingenuity of man could devise and Daphne became a place alluring, delightful, voluptuous.

But there was more than nature and art; there was also life. The temples and groves were peopled, not with gods, goddesses, and nymphs, for they were represented in statues of gold and marble, but with men and women, priests and priestesses, rendering this most beautiful spot a scene of vital activity.

It is difficult for us to imagine the splendor of the service in an ancient heathen temple. At Daphne, the flaming altar, the smoking censer, the ministering priests in gaily-colored robes of symbolic

XUM

Photograph by Ellsworth Huntington

SYRIAN WOMEN GRINDING WHEAT

The natives of the plains and hills in the vicinity of Antioch still pursue their daily tasks of the household in the same primitive ways which they practiced in the time of Christ.

meaning, the chanting of the service, and the religious procession, wreathed and garlanded with leaves and flowers, had all been brought to the highest state of perfection.

ROMAN SOLDIERS CORRUPTED IN THE GROVES OF DAPHNE

But there was more than the stately temple service that enticed worshippers to Daphne. There were the celebrations of the feasts, especially the great feast of the return of the year, when nature everywhere was bursting into life—the Feast of Fertility, poetic in conception, but when left free from the law of moral obligation degenerating into an immoral revel and debauch.

The very nature of Daphne, the very suggestion of the air, the very murmur of the brooks, all invited one to cast chastity to the winds and, under the name of religious worship, to indulge every passion. It was a true following of the tradition of Apollo and Daphne.

In the time of the Antonines there were many complaints that Roman soldiers and officers were being weakened by the pleasures of Daphne, and that Roman customs were first corrupted "when the Syrian Orontes emptied its filth into the Roman Tiber."

But the very extreme of wickedness at Antioch seems to have reacted for its reformation. Christianity spread rapidly in the city, and when the "apostate" emperor, Julian, came to sacrifice at Daphne and to try to revive the ancient rites, instead of the grand procession and the abundance of victims for the altar, a single priest came, bringing a goose for the offering.

A CITY OF DESTRUCTIVE EARTHQUAKES

Typhon, the terrible mythological dragon who was so fiercely at war with the god Zeus, is reported to have been buried in the mountains around Antioch after having been struck down by a thunderbolt. The old name of the river Orontes is

Photograph by Maynard Owen Williams

GREAT, CREAKING WOODEN WHEELS LIFT THE WATERS OF THE ORONTES TO THE IRRIGATION DITCHES, MAKING FERTILE THE ADJACENT PLAINS

Many luxuriant gardens still surround the city of Antioch, but the beauty of its once unrivaled suburban villas is gone forever.

said to have been Typhon. The struggles and twistings of this monster under the mountains were held to be the cause of numerous earthquakes along the Orontes Valley.

However fanciful this explanation may be, the fact remains that time and again the whole region has been devastated by fearful earthquakes. One ancient writer says the foundations of the earth were twisted, and that great cracks were opened in the earth and people were swallowed up alive.

Ten earthquakes have been enumerated which occurred between 150 B. C. and the sixth century A. D. Since that date there have been many more, and even at the present time frequent tremors are felt along the Orontes Valley.

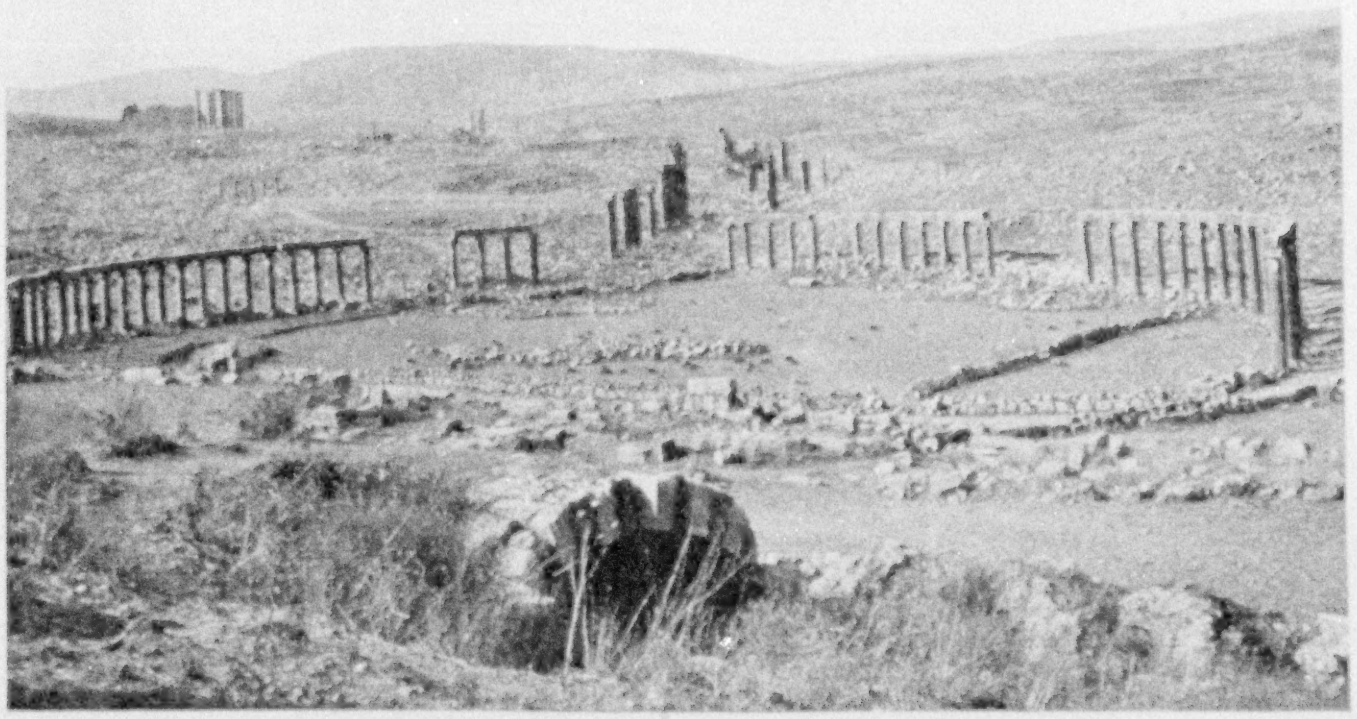
The two most destructive earthquakes occurred in the reigns of Trajan and Justinian. In the former it is said that even the people on Mount Casius trembled and the fountains and rivers underwent great changes. In the latter there was great loss of life. Large crowds of people had gathered in the city to celebrate the Feast of the Transfiguration. At this time it is said that the very earth seemed to bubble and rise and fires broke out all over the city.

ONE EARTHQUAKE COST ANTIOCH 250,000 LIVES

The loss of life from falling walls and flames is reported at 250,000. This number would seem almost incredible were it not for a similar appalling loss of life at Messina in recent years.

Besides the earthquakes, other misfortunes befell the city. The graphic account given by Gibbon of the earthquakes, fires, and plagues that from time to time devastated the Roman Empire might well be localized in Antioch. Besides these, there were the vicissitudes of war, plunder, and massacre that frequently visited the city.

After each calamity Antioch was rebuilt, but after the great destruction by the earthquake in Justinian's reign it



Photograph by Maynard Owen Williams

RUINS OF JERASH, ONCE ONE OF THE WEALTHIEST AND MOST FLOURISHING CITIES OF PALESTINE, WHOSE COLONNADED STREET IS SUPPOSED TO HAVE BEEN COPIED FROM THAT OF ANTIOCH

Situated among the mountains of Gilead, 20 miles east of the Jordan, Jerash once had a "naumachia" as big as the Yale Bowl, in which miniature ships fought naval battles for the delight of amusement seekers. Despite the ravages of time and of earthquakes and the depredations of a colony of Circassians which now inhabits the site and finds the ruins of temple, theater, and palace an inexhaustible quarry from which to take material for modern houses, more than 230 columns still stand as monuments to a glorious past.

never again arose to its former beauty or importance.

In the House of Seleucus there are three names that are especially known to readers of history—Seleucus Nicator, the founder of the dynasty; Antiochus III, sometimes called "The Great"; and Antiochus Epiphanes, best known, probably, for his persecution of the Jews and their rebellion under the Maccabees.

Seleucus Nicator extended his power until he ruled over practically the whole of Alexander's empire with the exception of Egypt. He met his death by assassination, when journeying to his old home in Macedonia. He was really the greatest of all the kings of Syria, both as a soldier and as an administrator. But Antiochus III, who ruled about 223 B. C., bore the title of "Great."

The latter was a combination of daring ability, personal valor, and inexcusable indecision. A happy combination of circumstances extended his empire to the Far East, over all Asia Minor, Greece, and Macedonia. But there he encountered the power of Rome. Hannibal appeared as his friend, seeing in Antiochus an opportunity of avenging himself on Rome. But the Scipios were completely victorious and Asia Minor was forever lost to Antioch.

ANTIOCHUS IV PROCLAIMED HIMSELF A DIVINITY

Antiochus IV, or Epiphanes, came to the throne in 175 B. C. with a Roman training. He was a genius, a profligate, and a spendthrift. Under him the city of Antioch was rebuilt, beautified, and adorned. Olympian games were introduced on a most extensive scale. A whole month was given to sports and feasts. To carry out all of his extrava-

gant ideas, money in great sums was necessary. He therefore proclaimed himself to be god manifest in the flesh, identifying himself with Zeus. Then he proceeded to strip the temples of Syria and Palestine of their wealth. In his endeavors to despoil the temple in Jerusalem and to force the Greek civilization on the Jews, he aroused the fierce resistance of the famous Maccabee family.

WILD SCENES IN ANTIOCH'S STREETS

During the reign of Epiphanes no capital city ever saw such scenes as he enacted in the streets of Antioch. Whatever wild scheme of debauch or adventure could be suggested, this brilliant but mad king indulged in. Disguised as a common ruffian, he, with a group of boon companions, would commit every conceivable act of license in the gay thoroughfares of the city.

Yet Antiochus IV was an ardent patron of science, literature, and art. Extensive geographical explorations were carried on along the Persian coast; schools of poetry and oratory were encouraged; the finest specimens of architectural art and the most beautiful of sculptures were erected in his magnificent capital. He ended his life in a campaign against the Armenians, dying from a most noisome disease, a graphic account of which is given in the Book of the Maccabees.

THE LAST DAYS OF THE KINGDOM OF ANTIOCH

The last half century of the Kingdom of Antioch trails off into a story of petty jealousies between rival claimants for the throne, until all is swallowed up in the conquests of Pompey. Then, under Roman rule, Antioch enters upon its most glorious period of history.

Rome, of course, was the center of all magnificence and power. The city of Alexandria, in Egypt, was reckoned second in size and wealth. Antioch was considered the third city of the Empire, and hence of the world. But when one reads of this splendid city, the gateway of the East, the starting point of so many important military expeditions, the residence of so many scholars, generals, and emperors, he cannot but question whether Antioch were not merely the third city in the world, but almost the rival of Rome itself.

The city was finally lost to the Romans when it was captured by the Saracens, in 635. Arabic historians praise the city for its walls, its fine residences, and the number of its people; but they make no mention of its public buildings, which doubtless had been thrown down by the numerous earthquakes and had fallen into decay through the ravages of time.

The Crusaders captured the city in 1098 and held it as the capital of northern Syria until 1268, when it was captured by the Sultan of Egypt. In 1832 it was taken by Ibraham Pasha, but restored to Turkish rule at the conclusion of peace.

ANTIOCH'S GLORY FADED WITH THE ARRIVAL OF THE PERSIANS

However, the glory of Antioch and its historical importance seem to have passed away when it was sacked by the Persians under Chosroes, in 538. At that time fire, plunder, and massacre followed one another. Many of the statues and beautiful marbles, together with large treasures of gold and silver and great companies of citizens, were carried away to the new Persian Antioch, near Ctesiphon.

There is a modern city of considerable importance. It occupies the site of the ancient city and is largely built from the old ruins. The splendid walls and gateways of the old city, fine specimens of architectural construction, are rapidly disappearing for building stone.

A large industry in the digging of licorice root is here carried on and the product is chiefly exported to America. Great creaking, wooden wheels lift the water of the Orontes to the level of irrigation ditches.

Luxuriant gardens still surround the city and roads radiate from the great bridge in all directions.

But Time's hand has fallen heavily on the once proud city and only the student of history, basing his view as much on his reading as on the visible reminders of a departed magnificence, can succeed in recalling the gay, glad days when "Antioch the Glorious" was the brilliantly jeweled "Crown of the East."

XUM

Photograph by Paul Thompson

THE STOCK EXCHANGE BUILDING, NEW YORK: NEAR THIS SITE, IN 1792, A GROUP OF BROKERS MET UNDER A BUTTONWOOD TREE AND ORGANIZED THE "NEW YORK STOCK EXCHANGE"

The Empire State was originally called New Netherlands by its Dutch settlers, but in 1664, when it was captured by the English, its name was changed to New York, in honor of the brother of King Charles II (see text, page 106).

THE ORIGIN OF AMERICAN STATE NAMES

By Frederick W. Lawrence

TO ALL Americans the origin of the names of our States should prove an interesting subject, and from it no small amount of history and geography is to be learned. It is, however, a more complicated subject to trace than the origin of the nomenclature of European States, which, for the most part, bear names derived simply from the ancient tribes by which they were formerly inhabited.

For example, England, Scotland, Hungary, Belgium, France, and Switzerland are names that come down to us more or less directly from the earlier tribal inhabitants of these countries.

The State names of the United States in many cases reflect the varied nationalities which first explored or colonized these States. Many bear Indian names, descriptive of some natural feature of the region or taken from some tribe living in that section, and we find a few named for European sovereigns and other individuals, while one bears the name of a fabled island of romance and another is named after a holy day. Still others bear names that do not fall into any particular class, but which must be treated individually.

Hence we find that, although the majority of our States have names of Indian origin, there are sufficient of English, French, and Spanish source to mark the limits of the exploration and colonization of those nations. The Indian names are typical of America, and although the red man has dwindled, both in numbers and power, his sonorous and euphonious place-names confront us on every hand.

Strong ties bound our earlier settlers to their mother countries, and from them were derived most of the early geographical names. While we cannot but admit that this may have shown a commendable love of the mother land, as evinced by a laudable desire to spread her place-names into the wilderness, it is also manifest that this tendency was in many cases indicative of a paucity of imagination and a poor sense of the fitness of names. The practice resulted in giving us many inappropriate place-names; for names such as New York, Maryland, and New Hampshire in themselves convey nothing to our minds. On the other hand, Kentucky, Massachusetts, and Alabama, although we may not be familiar with their exact meaning, at least speak to us of an earlier and sterner day, when the red man roamed this land and the settler cleared his farm and built his home with the ever-present menace of an Indian attack in view.

Indian names, when translated, generally tell of some natural feature of the region—of a swiftly flowing river, a vast lake, a mighty mountain—always something to which the Indian was bound by every tie.

THE INDIAN HAD NO ALPHABET TO RECORD HIS NAMES

Indian names have come to us in various and changed forms, for the Indian had no alphabet, and the white man had to represent his place-names phonetically as best he could; hence the wide divergence in the spelling of many Indian names. But, even in their changed forms, they are always flowing and beautiful in sound, as witness such names as Penobscot, Housatonic, Susquehanna, Kanawha, Catawba, and Tacoma. No names brought in from a foreign land can equal these for beauty and euphony, nor will any others serve to commemorate the vanishing race which once occupied our country.

Of our 48 States, we find that 25 bear names of Indian origin, while 12 are English, six Spanish, three French, and two bear names that must be considered, from a historical standpoint, American.

Considering the States with English names first, the origin of most of these will be familiar to us from our studies in American colonial history. The first of these is New Hampshire, the original territory of which was conveyed by a patent of the Plymouth Company to John

XUM

Photograph by U. S. Air Service

AN AIRPLANE VIEW OF NEW YORK'S SKYSCRAPERS AND BATTERY PARK

Mason in 1629 and named by him for the English county of Hampshire.

RHODE ISLAND OWES ITS NAME TO A DUTCH NAVIGATOR

When the Dutch navigator Adrian Block sailed into Narragansett Bay, about 1614, he encountered an island of fiery aspect, due to the red clay in some portions of its shores. He called it Roode Eylandt (Red Island), and the surrounding country received its name from that of the island. The English settlers, who, with Roger Williams at their head, received a charter for this region from the English Crown in 1644, Anglicized the name, making it Rhode Island. There is a theory, also, that our smallest State was named after the Island of Rhodes, in the Mediterranean, but it is difficult to substantiate this claim, as the two localities in no way resemble one another.

The Empire State, New York, as is well known, was originally called New Netherlands, while the city was known as New Amsterdam. But when the colony was taken over by the English, in 1664, the names of both were changed to New York, not, as might be supposed, after the city of York, England, but in honor of Charles II's brother, the Duke of York, afterward James II of England, to whom the grant was made.

The duke, in turn, transferred the southern portion of his grant to Sir George Carteret, who settled there and named the country after the Channel Isle of Jersey, which place he had bravely defended against the Parliamentary forces in the English civil war.

PENNSYLVANIA IS THE ONLY STATE BEARING ITS FOUNDER'S NAME

In the southern portion of New Jersey and in Delaware the Swedes made their only American settlement, which they called New Sweden, but the colony was short-lived and only a few town-names

Photograph by U. S. Air Service

THE WATERFRONT OF THE WORLD'S LARGEST CITY, AS SEEN FROM THE AIR: THE STEAMSHIP PIERS OF NEW YORK

remain today to remind us of their occupation.

Charles II of England, the "Merry Monarch," spent so much of his country's funds on pleasure that state debts often remained unpaid. One of these was for salary to one Sir William Penn, one of the lords of the admiralty, who, on his death, bequeathed the claim, which amounted to some £16,000, to his son, William Penn, a Quaker. The latter agreed to accept a land grant from the crown in exchange for the debt. The land was described in the royal grant as "a tract of land in America, lying north of Maryland, on the east bounded by the Delaware River, on the west limited as Maryland, and to the northward to extend as far as plantable." Had this last boundary been strictly adhered to, Pennsylvania would indeed be the largest State in the Union.

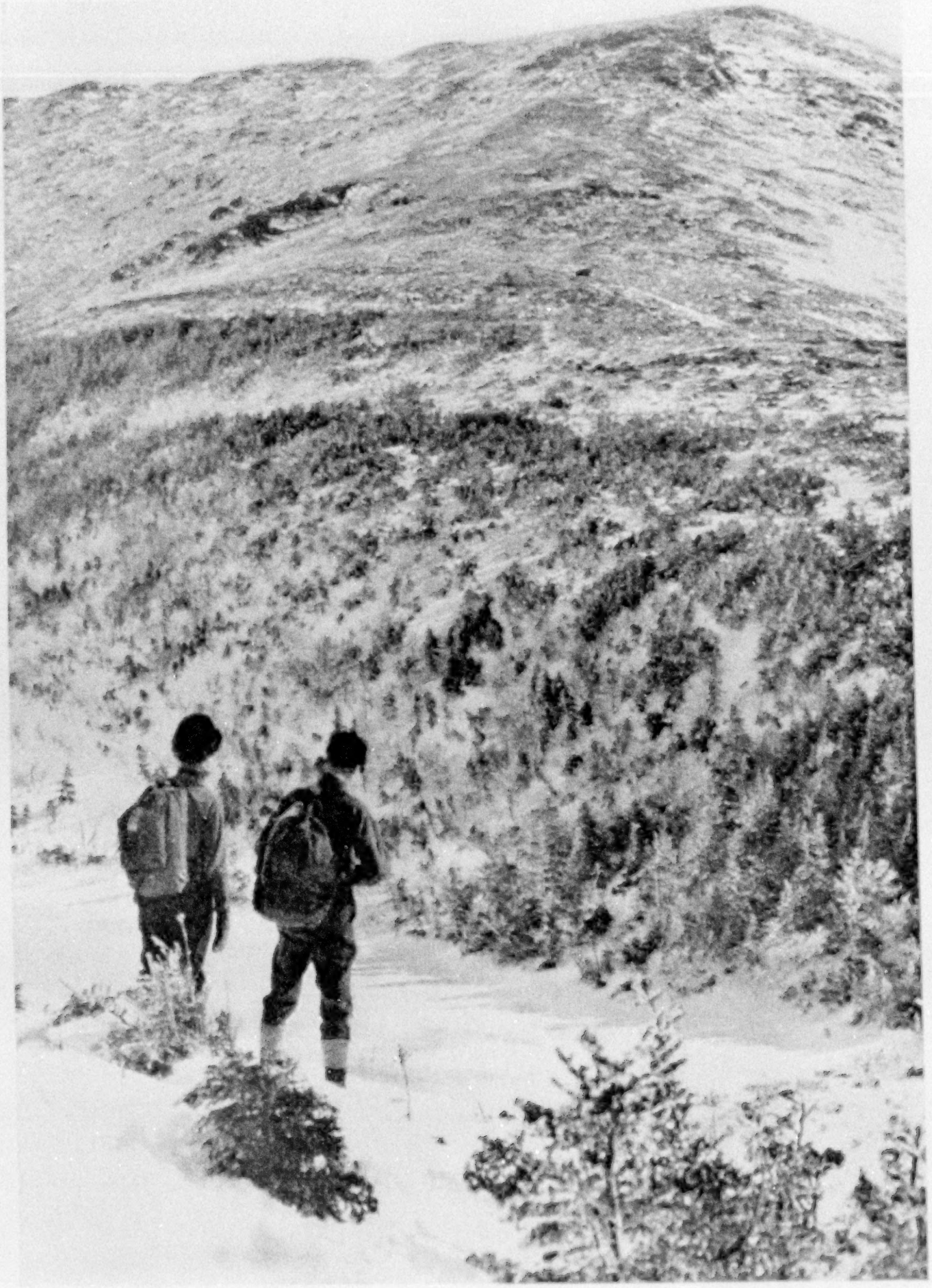
Penn wanted to call this land "Sylvania" on account of its vast forests, but the king insisted that the founder's name be incorporated in that of the colony, and thus it is as Pennsylvania, literally "Penn's woods," that the Keystone State is known to us today. It is the only State named for its founder.

Our second smallest State, Delaware, bears the name of Lord de la Warr, first governor and captain-general of Virginia, who in 1630 went on an exploring expedition in the bay and river after which the State is named.

In this connection it is interesting to note that the Leni-Lenape tribe of Indians were also called Delawares, after the river valley which they inhabited, this being a reversal of the custom of naming a State after an Indian tribe.

The first English Roman Catholic settlement in America was made in Mary-

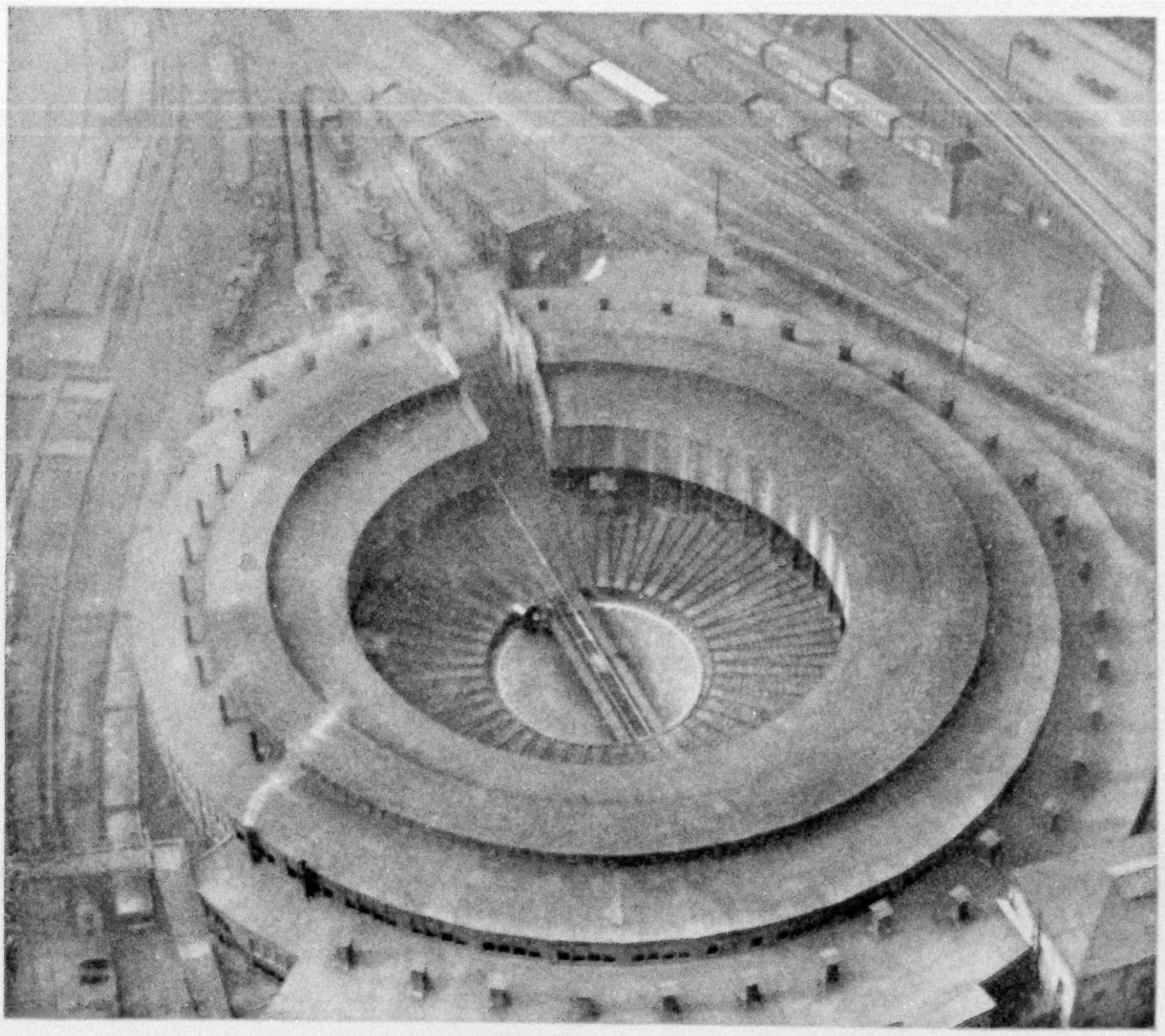
XUM



Photograph by Kenneth D. Smith

EAGLE LAKE AND MOUNT LAFAYETTE, WHITE MOUNTAINS, NEW HAMPSHIRE

New Hampshire was named for a county in England. Its nickname is "The Granite State."



Photograph by U. S. Air Service

A RAILROAD ROUNDHOUSE PRESENTS A STRANGELY SYMMETRICAL PICTURE FROM THE AIR: PHILADELPHIA, PENNSYLVANIA

As the home of Independence Hall and the birthplace of the Declaration of Independence, the Keystone State, whose name means "Penn's Woods," has chosen "Virtue, Liberty, and Independence" for its motto.

land, in 1634, and this colony, by the way, was the first to extend religious toleration to all. It was named after the queen of Charles I, Henrietta Maria, who was the daughter of Henry of Navarre and was of the Roman Catholic faith.

LOYALTY OF SETTLERS TO THE BRITISH CROWN REFLECTED IN STATE NAMES

The strong tendency of the earlier English settlers to perpetuate English royal names in their settlements is indicative of their loyalty to the crown and is further illustrated in the names of the Virginias, the Carolinas, and Georgia.

The first of these was named by Sir Walter Raleigh for Elizabeth, the Virgin Queen, who was on the throne of England when the first settlements were attempted, in 1585. It is interesting to note that Virginia is the only State whose name appears in literature associated with the royal title. Spenser dedicated his "Faerie Queene" to "Elizabeth, by the grace of God, Queene of England, France and Ireland and of Virginia."

When the State of West Virginia was formed, in 1863, it was first proposed to call it "Kanawha," after one of its rivers, and much regret has been voiced that this fine old Indian name was not adopted.

There has been some confusion as to which King Charles the Carolinas were named for. In 1560 Jean Ribault, a French explorer, named this region after Charles IX of France. The name, how-

XUM

Photograph by William H. Rau

PLEASURE-SEEKING THRONGS ON THE BEACH AND BOARDWALK AT ATLANTIC CITY, NEW JERSEY

The Duke of York, for whom the colony and city of New York were named, transferred the southern portion of his grant to Sir George Carteret, who named the country New Jersey, after the Channel Isle of Jersey (see the article on "The Channel Islands," in this issue of THE GEOGRAPHIC).

ever, did not come into general use and for a time disappeared. About 1630 the country was referred to as Carolina in some English state papers, and it was considered to have been so named after Charles I of England, but it was not until 1663 that the name Carolina was definitely applied to this section by the lords proprietor, who had received a grant to the land from Charles II and who named the country in his honor.

Georgia was named by and for King George II of England, and the colony was referred to under this name in the charter which that monarch granted to General Oglethorpe, the founder, in 1732.

THREE OF OUR STATES HAVE FRENCH NAMES

Of the three States bearing French names, the origin of one is doubtful. This small number is out of proportion to the extent of French explorations, evidence of which can be gained from the trail of French place-names from the mouth of the St. Lawrence, through Montreal, Quebec, and the Great Lakes, Detroit, Sault Ste. Marie and Duluth, down the Mississippi Valley, past Des Moines and St. Louis to New Orleans.

The French made some great discoveries—the St. Lawrence, some of the Great Lakes, and Lake Champlain, for instance. They were fearless adventurers: no land was too wild to explore, no river too swift to cross or too dangerous to navigate, no mountains too high to ascend. But the fact remains that, in spite of all these accomplishments, they were not vigorous colonists.

Vermont was first explored by Samuel de Champlain in 1609 and was so named by him after its Green Mountains (Vert Mont), which are the dominating natural feature of the State. It is altogether fitting that the name of this intrepid explorer should be perpetuated in that of the largest fresh-water lake in the United States (aside from the Great Lakes), which forms the greater part of the western boundary of the Green Mountain State.

The generally accepted version of the origin of the name of Maine is that it was so called by some early French explorers after the French province of that name, wherein was located the private estate of Henrietta Maria, wife of Charles I of England.

There is another meaning ascribed to the name, fairly well supported by authorities. According to this version, the fishermen on the islands along the coast of Maine always referred to that region as the "Mayn land," and in support of this theory we find the colony referred to in a grant of Charles I to Sir Fernando Gorges in 1639 as "the province or county of Mayne."

The third State name of French origin is that of Louisiana, so called in honor of Louis XIV. The name was first applied in 1683 by the daring French explorer, La Salle, who employed it to indicate the vast territory watered by the Mississippi and its tributaries.

THE SIX STATES WITH SPANISH NAMES

Permanent Spanish settlements within the present boundaries of the United States were made earlier than those of any other country and they were numerous. As a result, we have six States bearing names of Spanish origin, and in them and their neighbors we find a large number of towns and counties from this tongue.

The course of the early Spanish explorers can be traced from Florida with such place-names as St. Augustine (an Anglicized form of the Spanish name), Hernando and Fernandina; through Texas with Corpus Christi, San Antonio, and El Paso; New Mexico with Santa Fe, Las Vegas, and Albuquerque; Arizona with San Carlos and many smaller Spanish-named towns, to California, with San Francisco, Sacramento, and Los Angeles and a host of "Sans" running the whole list of saints' names from Anselmo to Rafael. In southern Colorado, Nevada, and western Utah, also, traces of Spanish exploration and settlement can be gleaned from the place-names.

The first State to bear a Spanish name was Florida, which was discovered by Ponce de Leon on Easter Sunday, 1512. Two theories exist regarding the origin of the name. One refers to the Spanish term, Pascua Florida (Easter Sunday—

THE SUGAR BEETS OF CALIFORNIA ARE SUPPLEMENTING THE CANE FIELDS OF CUBA AND LOUISIANA IN ABATING THE WORLD'S SUGAR SHORTAGE

The name "California" originally appeared in a Spanish romance. It was supposed to be an island of fabulous wealth. The followers of Cortez applied it to Lower California, and later it spread to the present State. The choice of this name, suggesting a place of gold and precious stones, seemed almost prophetic.

Photograph by Eugene S. Jones

OFF OWLSHEAD: ROCKLAND, MAINE

Maine, the Pine Tree State, is one of the three Commonwealths of the Union whose name is supposed to be of French origin.

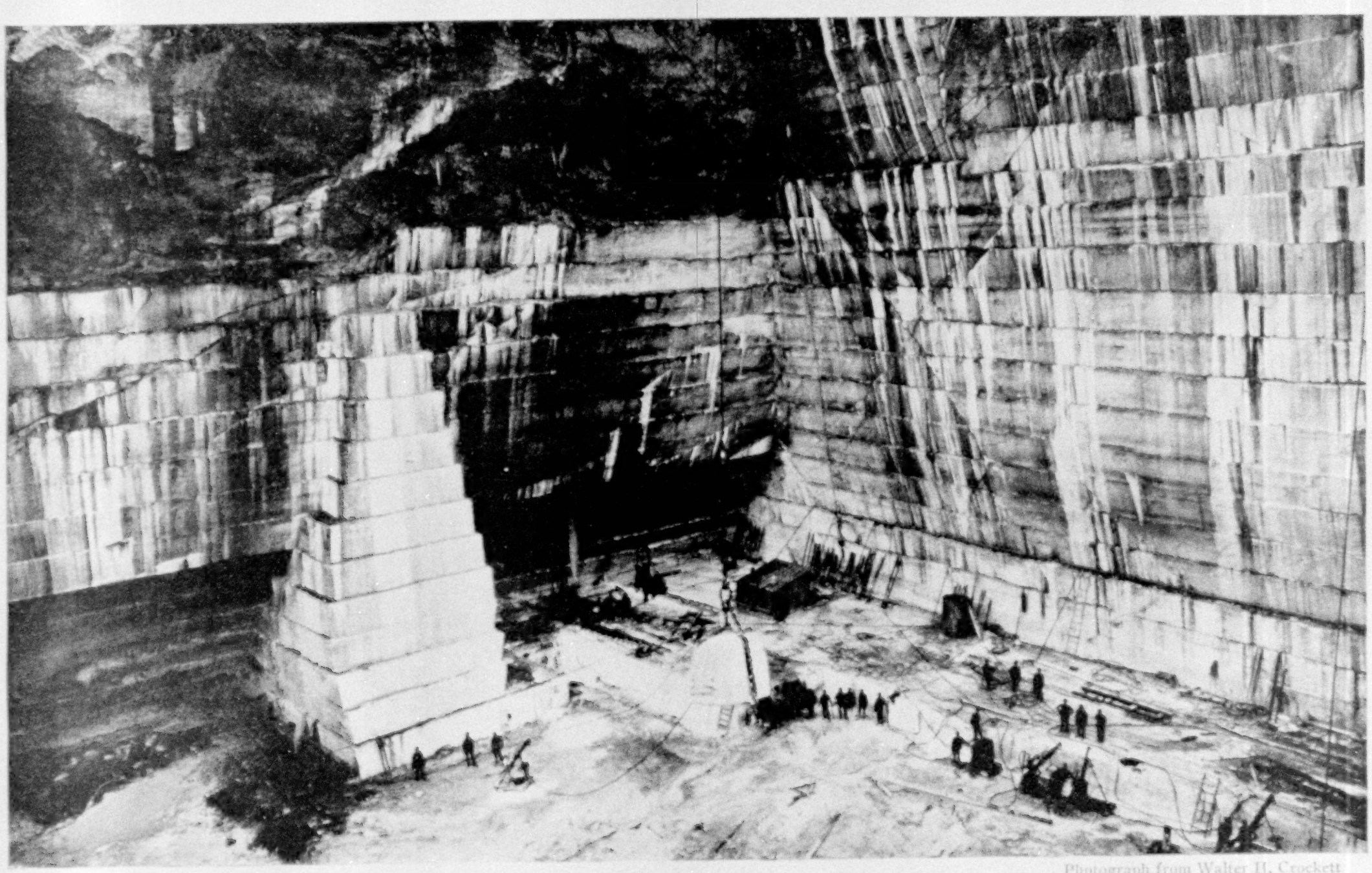
literally, "Feast of the Flowers"), having reference to the flowers with which the churches in Spain are decorated on that day. In view of the day on which the discovery was made, this is probably the correct explanation of the origin.

The second theory is that Ponce de Leon simply used the word "Florida," meaning "flowery," from the aspect of the country.

The other Spanish-named States lie in the Far West. Any one who has seen the snow-clad peaks of Nevada can well appreciate the descriptive word, "Snowy."

While not explored or colonized by Spaniards, Montana bears a Spanish (some say, Latin) name. This large State's giant ranges and cordilleras make its name, which means "Mountainous," singularly appropriate.

Colorado was probably named from the river, although only its tributaries flow through the State. The word is Spanish for "red" in the sense of



Photograph from Walter H. Crockett

THE SUTHERLAND FALLS MARBLE QUARRY AT PROCTOR, VERMONT

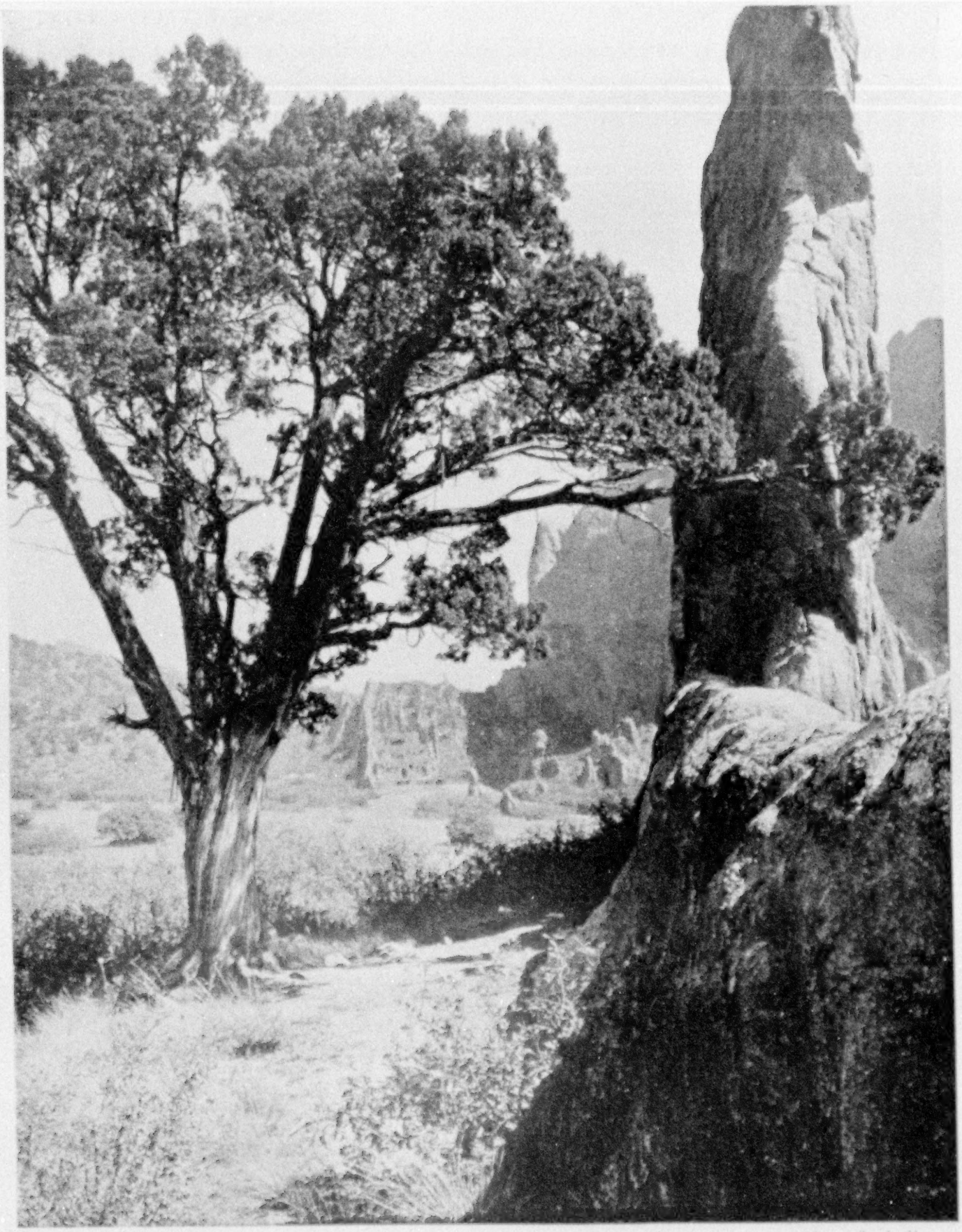
Vermont has accepted for its nickname the English equivalent of its French name, Green Mountain (Vert Mont). Inasmuch as its neighbor, New Hampshire, is known as the Granite State, it might with propriety be called the Marble State, in recognition of such magnificent quarries as this at Sutherland Falls.

XUM

Official Photograph U. S. Navy

MIAMI, FLORIDA, AS SEEN FROM AN AIRPLANE

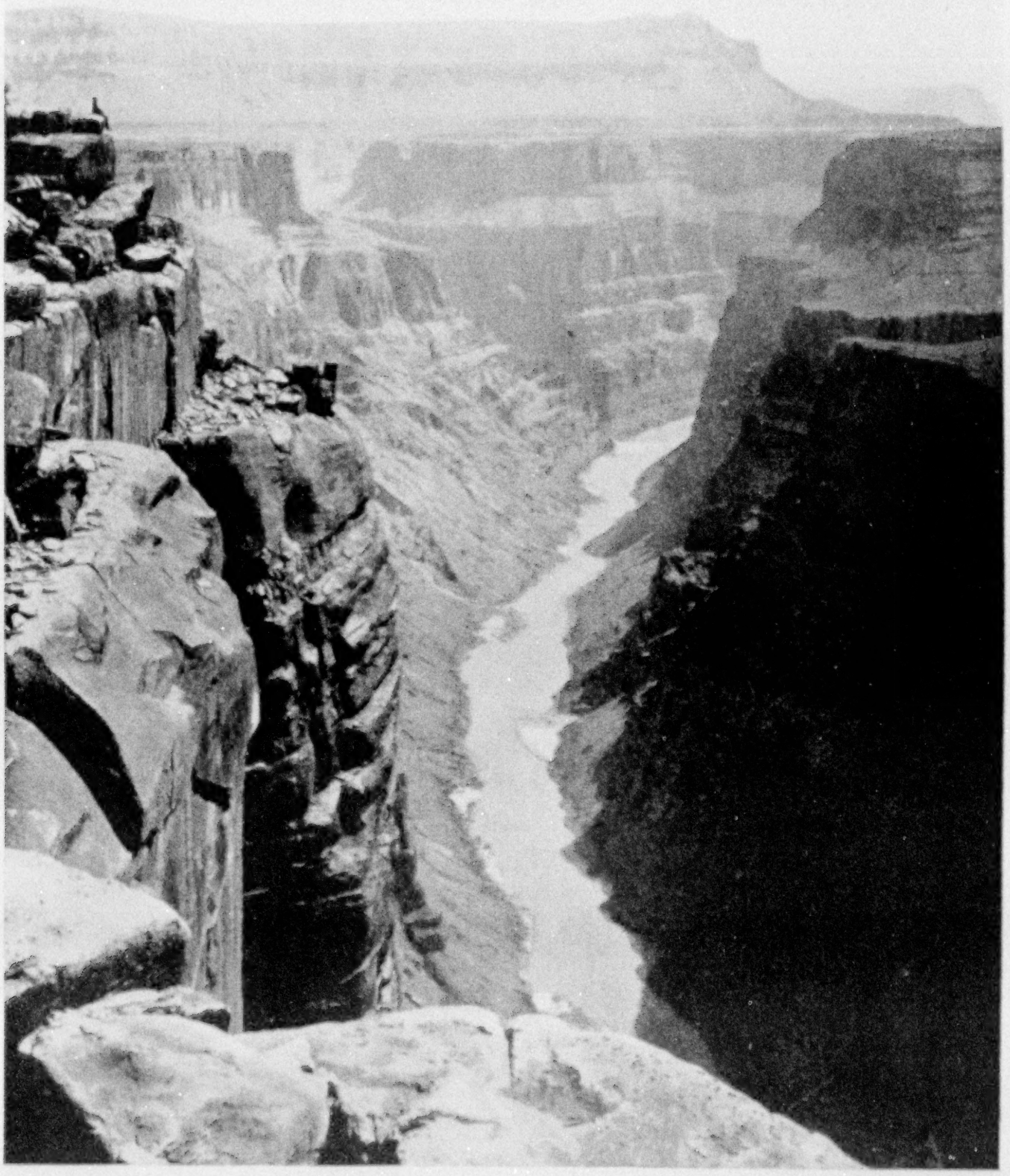
Florida owes its name to that searcher for the fountain of perpetual youth, Ponce de Leon, who sighted the Peninsula State on the day of the year celebrated in Spain as the Feast of Flowers. The beautiful aspect of its blossoming landscape, as well as the day of its discovery, made it eminently appropriate that the explorer should call it "Florida" (Flowery Land) (see text, page 111).



Photograph by the Photo Craft Shop

THE GARDEN OF THE GODS, COLORADO SPRINGS: COLORADO

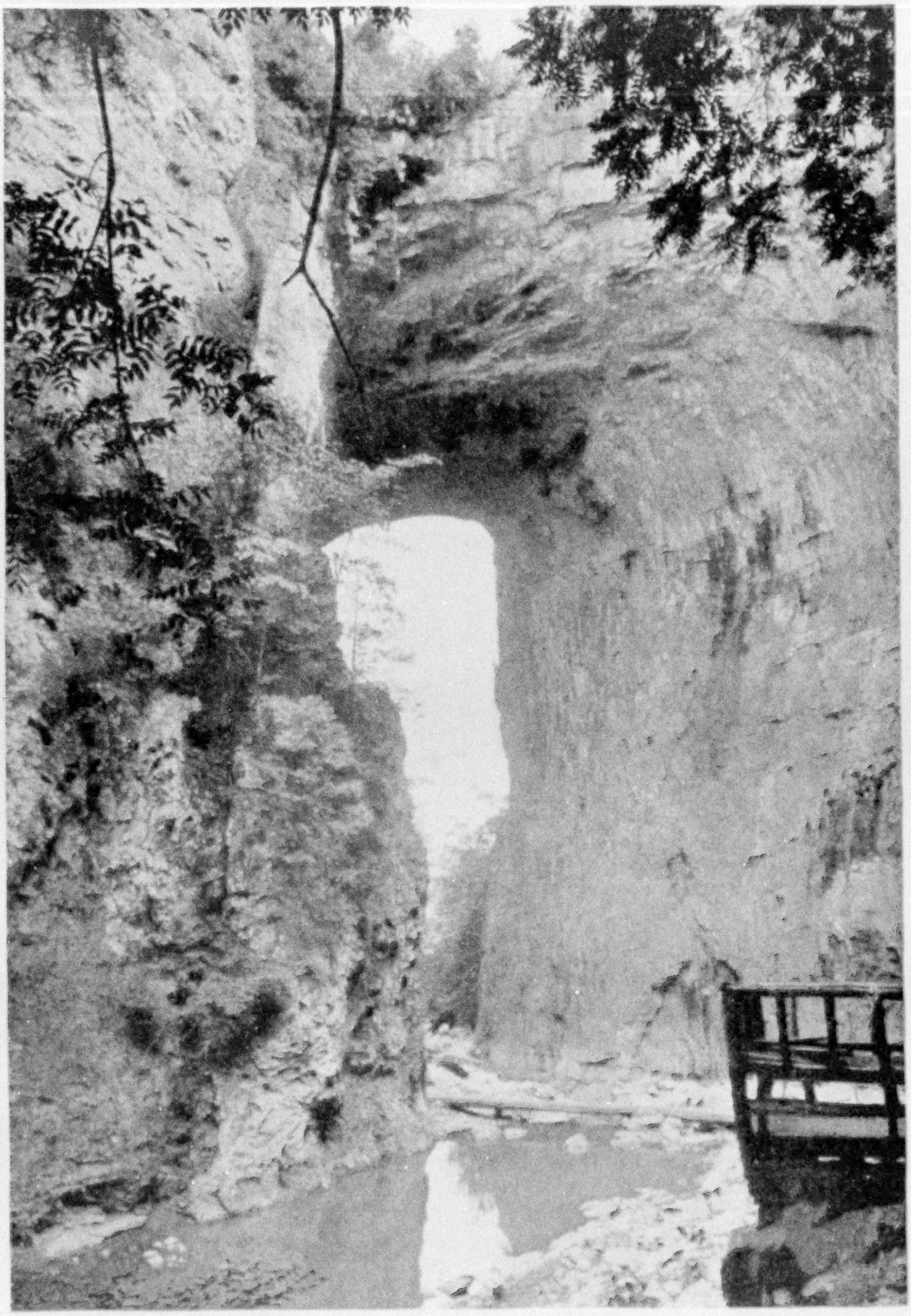
The Garden of the Gods is now a part of the Colorado Springs park system, having been transferred on Christmas Day, 1900, by the children of the late Charles Elliott Perkins, with the stipulation that the tract be forever kept open and free to the public. The red-rock formation of this region recalls the fact that the word "Colorado" means "red" in Spanish.



Photograph from N. H. Darton

THE GRAND CANYON OF THE COLORADO

Joaquin Miller, the poet, said of this scene: "Looking down more than half a mile into this 15-by-218-mile paint pot, I continually ask, 'Is any fifty miles of Mother Earth that I have known as fearful, as full of glory, as full of God?'"



© Detroit Publishing Company

VIRGINIA'S FAMOUS NATURAL BRIDGE

Known both as the "Old Dominion" and as the "Mother of Presidents," Virginia was christened by Sir Walter Raleigh in honor of Elizabeth, the Virgin Queen (see page 109).

"ruddy," and may come from the color of the stream at some places. Then, again, it is possible that the State was named from the red earth of some regions which were settled in the early days.

The name of California was originally given by some of the followers of Cortez, the conqueror of Aztec Mexico, to what is now known as Lower California, whence the name spread to the present State. The imagination of Cortez's men had been fired by the reading of an old Spanish romance of chivalry called "Las Sergas de Esplandian," in which was described a fabled island called California, where gold and precious stones in abundance were found, and they gave this name to the new land which they had discovered. It is strange that a name accidentally given should later prove so descriptive.

Some years later Sir Francis Drake, the daring English navigator, sailed into San Francisco Bay and called the region "New Albion"; but the name did not "take."

As to Oregon, the best information obtainable regarding the origin of its name is of varied nature and several theories are equally well supported. The first recognized theory is that the name was taken from that of a species of wild sage called "origanum," which grows in profusion on the coast of the State. The second is to the effect that the name is derived from the Spanish word "Oregones," meaning "Big-eared Men," supposed to have been given to the natives by a Jesuit priest who settled in that country in the early days.

Joaquin Miller, "The Poet of the Sierras," said that the name came from the Spanish "Aura Agua," meaning "Gently Falling Waters." It is on the strength of these two latter theories that this name is included with those of Spanish origin. Several other more obscure theories exist, but neither these nor the three mentioned above can be substantiated.

AMERICAN NAMES FOR ONLY TWO STATES

Two States may be said to have American names. The first is Washington, named for the Father of his Country, and the second Indiana, so called on account of the purchase and subsequent settlement by various Indian tribes of large tracts of land north of the Ohio River and within the present boundaries of the State.

INDIAN NAMES DERIVED FROM SEVERAL TONGUES

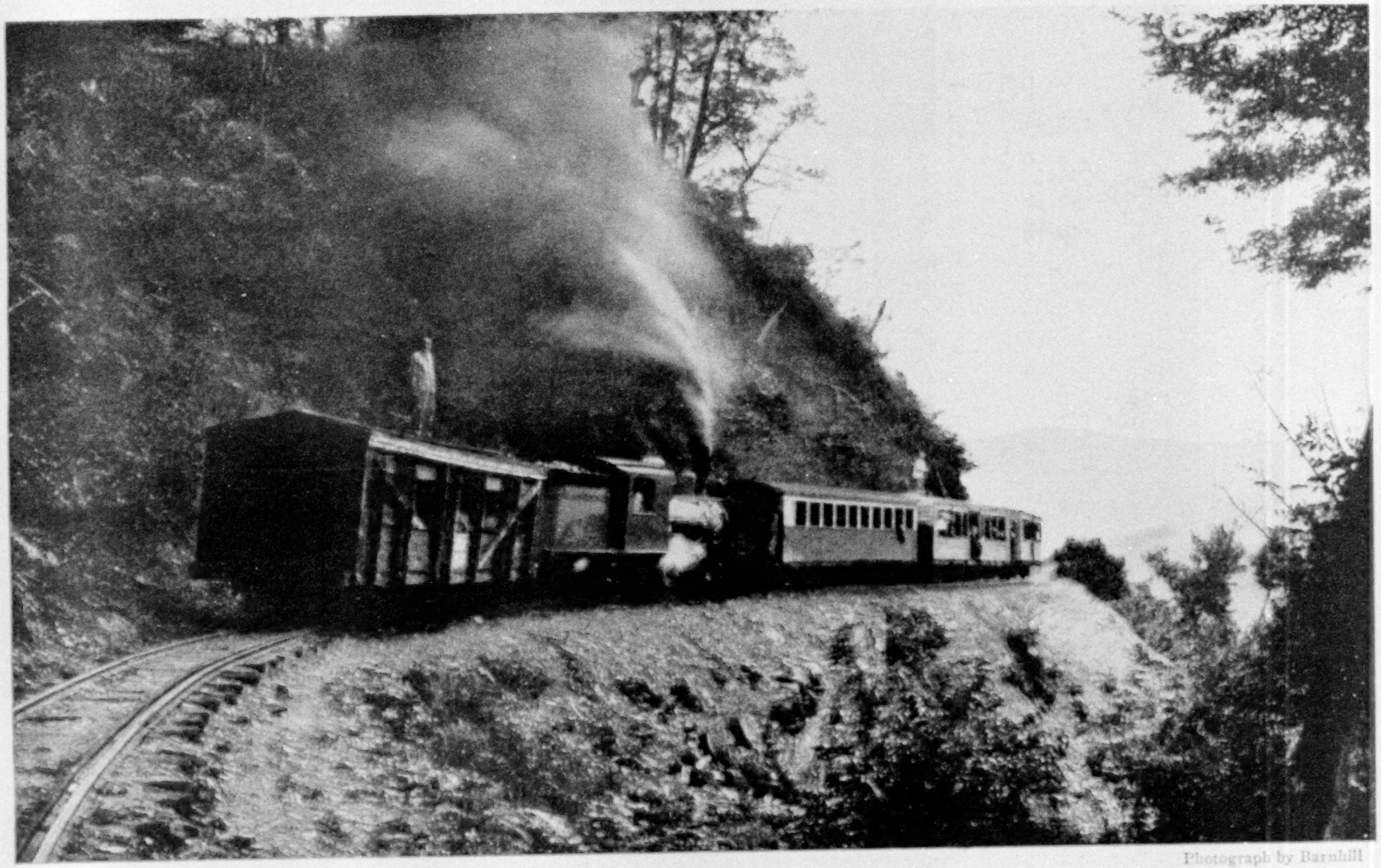
When we review Indian State names, we must remember that there was no one Indian tongue. Instead, there were several separate and distinct languages, and each of these was divided into many dialects. Hence the wide variance in Indian names in different sections of the country. For instance, note the wide difference between Penobscot and Kennebec in Maine and Chattahoochee and Apalachicola in Florida. Then, again, Mount Katahdin, in Maine, and the Kittatinny Range, in New Jersey, are from the same Algonquin tongue, but represent the Abenaki and Leni-Lenape, or Delaware, forms of the word for "Great Peak."

Most, if not all, of these Indian terms have suffered corruption at the hands of the white man, in some cases to such an extent that all connection with the original word seems to be lost; but the names as they remain still retain their beautiful and sonorous sound.

From the translation of Indian names we gain an idea of the practical mind of the Indian. He lived in the open, close to nature; he hunted and fished throughout his whole life, and his constant contact with the forests and streams, hills and plains, shows in his system of nomenclature, for his place-names are most descriptive and invariably based on some natural feature of the country.

The Indian never took names from other lands than his, and did not honor individuals with geographical names, as does the white man. He was seldom satisfied with short descriptive names, such as could be translated into "green hill" or "swift river," but was partial to polysyllabic names, which, when translated, had such meanings as "honey water of many coves" or "winding river of many fish." Such translations of Indian names remain with us, although the original words may have been shortened or corrupted by the white man.

XUM



Photograph by Barnhill

ON THE MOUNT MITCHELL RAILROAD AT RAINBOW GAP, NORTH CAROLINA

Historians disagree as to which of three kings is honored in the State names of North and South Carolina (see text, page 109).

XUM

Photograph by Curtis & Müller

CROSSING BOULDER GLACIER, MOUNT BAKER, WASHINGTON

In its name Washington honors the memory of the Father of His Country. There is no State named for the discoverer of America, but the District of Columbia makes amends for the oversight.

Photograph by Putnam & Valentine

A VIEW OF MOUNT HOOD, OREGON, FROM VANCOUVER, WASHINGTON, ON THE COLUMBIA RIVER

The "Evergreen State" is one of the two States of the Union having a strictly American name, the other being Indiana (see text, page 119).

XUM

Photograph from Peter Henderson & Co.

ONION SEED FOR THOUSANDS OF GARDENS BEING GROWN IN CALIFORNIA

The poppy is California's State flower and "Golden" its sobriquet. These seed pods in appearance suggest the opium poppy pods of Asia Minor.

Photograph by Putnam & Valentine

THE HIGHWAY AROUND LAKE TAHOE: CALIFORNIA

Sir Francis Drake, the English navigator, named California "New Albion," in honor of England, but the name did not "take." The coined name "California," taken from the Spanish romance, "Las Sergas de Esplandian," proved to be more appropriate.

Photograph by Putnam & Valentine

ALONG THE COLUMBIA RIVER, OREGON, ONE OF THE MOST MAJESTIC HIGHWAYS IN THE WORLD

Known both as the Beaver and the Sunset State, the origin of the name Oregon is traced to several sources, some authorities maintaining that it is derived from the name of a species of wild sage which grows here in profusion, while others attribute it to a Jesuit priest, who gave the name "Oregones" (Big-eared Men) to the Indians living "where rolls the Oregon."

The first State to bear an Indian name was Massachusetts, which was named for the bay—indeed, until 1780 the State bore its colonial name of "Massachusetts Bay" and has been nicknamed "Old Bay State." The word means "At or Near the Great Hills" and probably has reference to the heights of land around Boston, seen from the bay when approaching that city.

CONNECTICUT WAS ORIGINALLY QUONOKTACUT

The transition from Quonoktacut to Connecticut is an example of how Indian names suffered corruption at the hands of the white man. The word means "River Whose Water Is Driven in Waves by Tides or Winds," a typically long and descriptive title and taken from the principal river of the State, which was probably so named from the aspect near its mouth. "On Long River" and "Long River Without End" are other meanings which have been ascribed to this word.

In 1541 Hernando de Soto, the Spanish discoverer of the Mississippi, gave battle to a tribe of Indians at a place called Alibamo, on the Yazoo River, in Mississippi. This place was the fortress of a brave tribe called the Alibamons or Alabamas, who, after this battle migrated eastward to the shores of a river to which they gave their name and which in turn gave the State of Alabama its name. Some authorities give this word the meaning of "Here We Rest"; but this cannot be substantiated, the more so be-

XUM

A MOONLIGHT SCENE ON THE MISSOURI RIVER AT GREAT FALLS, MONTANA

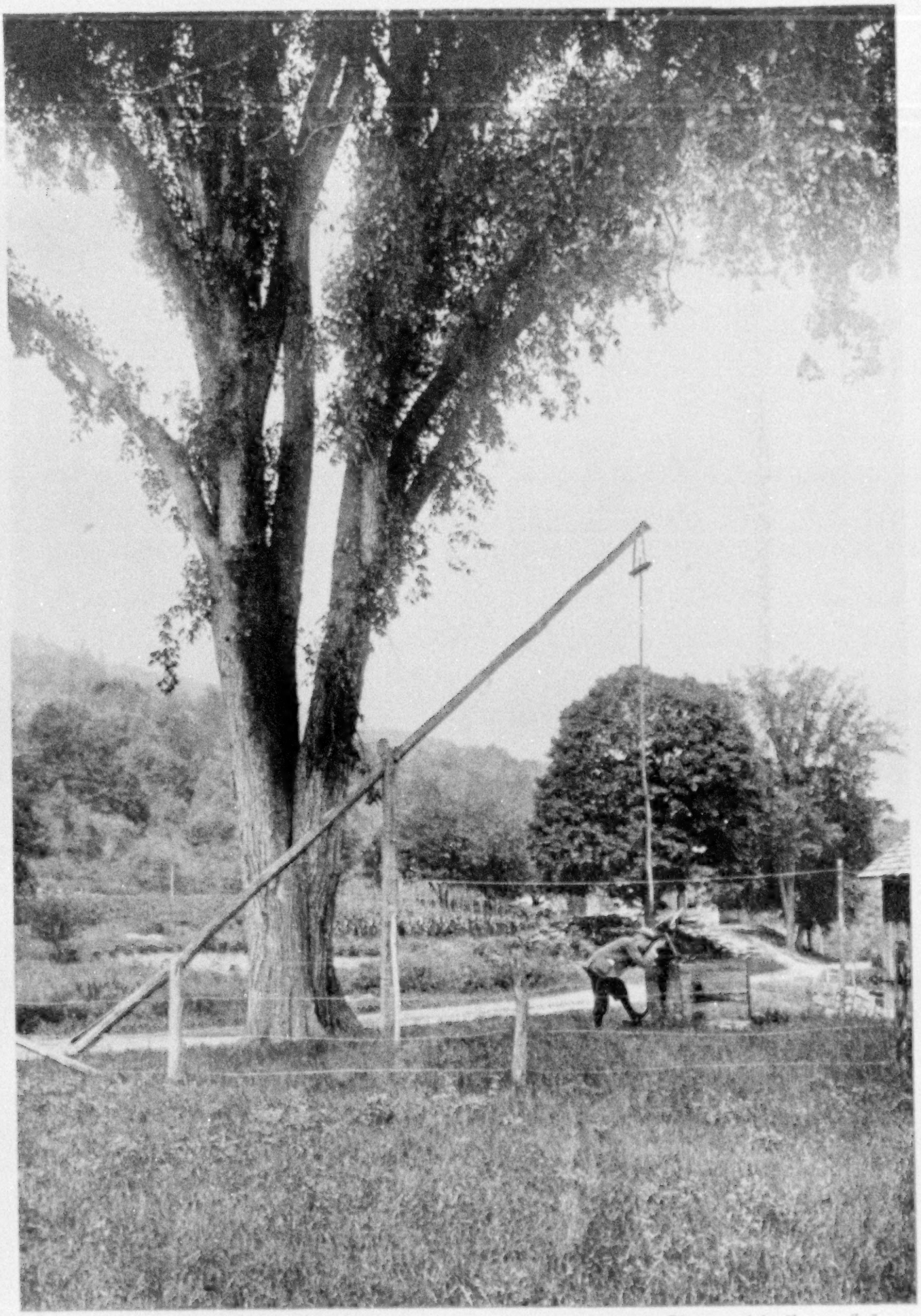
Montana is one of the six States bearing names of Spanish origin. The giant ranges and cordilleras make the word meaning "Mountainous" singularly appropriate.

XUM

Photograph by Utah Materials Company

ENJOYING SALT SEA BATHS AND BREEZES 600 MILES FROM THE OCEAN: SALT LAKE CITY, UTAH

The origin of the word "Ute," from which tribe of Indians the State of Utah gets its name, is unknown.



Photograph by Eugene S. Jones

THE OLD OAKEN BUCKET: MASSACHUSETTS

On Pond Street, in the quaint old village of Greenbush, on the South Shore of the Old Bay State, where Walnut Tree Hill slopes into the plain, is the "Old Oaken Bucket" homestead. The "well," the "deep-tangled wildwood," the mill," and the "brook" are all there, but the original bucket is in the Boston Museum.

cause the tribe of this name showed considerable proclivities for wandering.

Our greatest river, the Mississippi, gives name to one of our Southern States. The Indian word means "Gathering in of All the Waters" or "Great Long River," which have been interpreted by some to mean "Father of Waters," although this is not a technically correct translation. The Indian term for this stream would seem to indicate that the aborigines had a fair conception of its great size.

Texas, our largest Commonwealth and the only one acquired by annexation, has for a name an Indian word which originally meant "Friends" or "Allies" and which was also used as a form of greeting. Later it came to indicate a group of tribes generally allied against the Apaches of Arizona. The term gradually came to include tribes from regions as far apart as the Red River of Arkansas and the Rio Grande. The name was introduced by the early Spanish explorers, from whom later French and English settlers received it.

MEANINGS OF TENNESSEE AND KENTUCKY ARE OBSCURE

Like many other States, Tennessee is named for its principal river, although this name was originally given to one of its southerly tributaries and later spread to the main stream. The name is of Cherokee origin and came from a village or locality, Tanasse, inhabited by this great southern tribe. The meaning of the word has been lost, and interpretations, such as "Bend in the River," from the meanderings of the stream, are merely fanciful.

The Blue Grass State, Kentucky, also bears a name of uncertain origin and meaning. Reliable authorities state that the name was derived from an Indian word, "Kentake," meaning "Meadow Land." On the other hand, General George Rogers Clark, one of our greatest pioneers and one of the conquerors of this region, claimed that the word "Kentuke," meaning "River of Blood," gave the State its name. It has also been said that the word is of Shawnee Indian origin and means "At the head of a river," from the fact that this tribe used the Kentucky River in its migrations north and south. The popular translation of "Dark and Bloody Ground" was given to Daniel Boone, the famous borderer of the early days of the State, by an intelligent Indian chief of his day, and the title is supposed to have been descriptive of the bloody warfare in colonial times, not only between the Indians and the whites, but also between the Indians from both sides of the Ohio River, who used this region as a battle-ground.

The Buckeye State, Ohio, takes its name from its principal river, which bore a long Iroquois Indian name meaning "Beautiful River."

Illinois is named for the Illini tribe of Indians, who lived in that section and whose name meant "Men," and to which the French added their adjective termination, "ois."

INDIANS OFTEN USED NAMES OF RIVERS AND LAKES

The name of another Indian tribe, Ahhee-oo-ba, is perpetuated in Iowa. The name meant "Sleepy Ones" or "Drowsy Ones," and this probably goes far toward explaining why this tribe was nearly exterminated by the Sioux. Its members lived in the valley of the State's principal river, to which they gave their name and after which, in turn, the State was named.

The Indian's penchant for naming places after bodies of water is further illustrated in the name of Michigan, which comes from an Algonquin word, "Mishigamaw," meaning "Big Lake" or "Great Water," and called, of course, after the great lake of that name.

Now we come to another State name the origin and meaning of which are uncertain. Wisconsin, written by the early French explorers of that region as "Ouisconsin" and named for its chief stream, is thought to have come from a Sak Indian word translated as "Wild Rushing Channel" and also as having reference to holes in the banks of streams where birds nest. However, neither of these interpretations can be confirmed.

Another river-named State is Minnesota, derived from a Sioux Indian word meaning "Cloudy Water" or "Sky-tinted Water."

XUM

Photograph by the Phelps Studio

BREASTWORKS OF SAND THROWN UP BY THE WIND IN DEFENSE OF THE LAND AT ANNISQUAM, MASSACHUSETTS

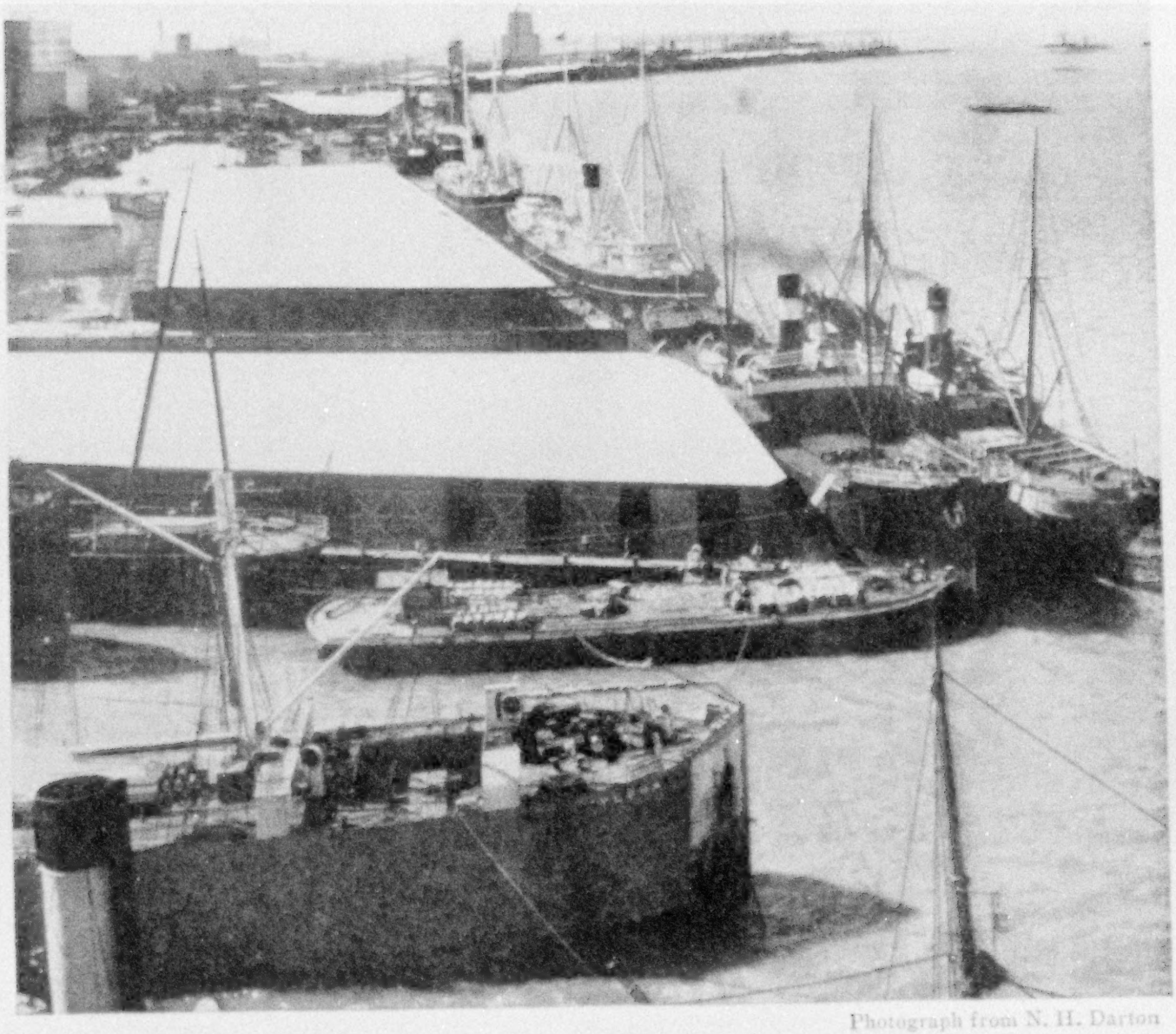
The word "Massachusetts" means "At or near the Great Hills," and probably had reference to the heights of land around Boston, seen from the bay.

XUM

Photograph by the Phelps Studio

THE SMOKE AND ROAR OF BATTLE BETWEEN THE YIELDING WATERS AND THE ADAMANTINE ROCKS OF THE MASSACHUSETTS COAST

Massachusetts was the first of our States to bear an Indian name, derived from Massachusetts Bay; hence the nickname, "Bay State."



Photograph from N. H. Darton

ALONG THE DOCKS AT GALVESTON, TEXAS

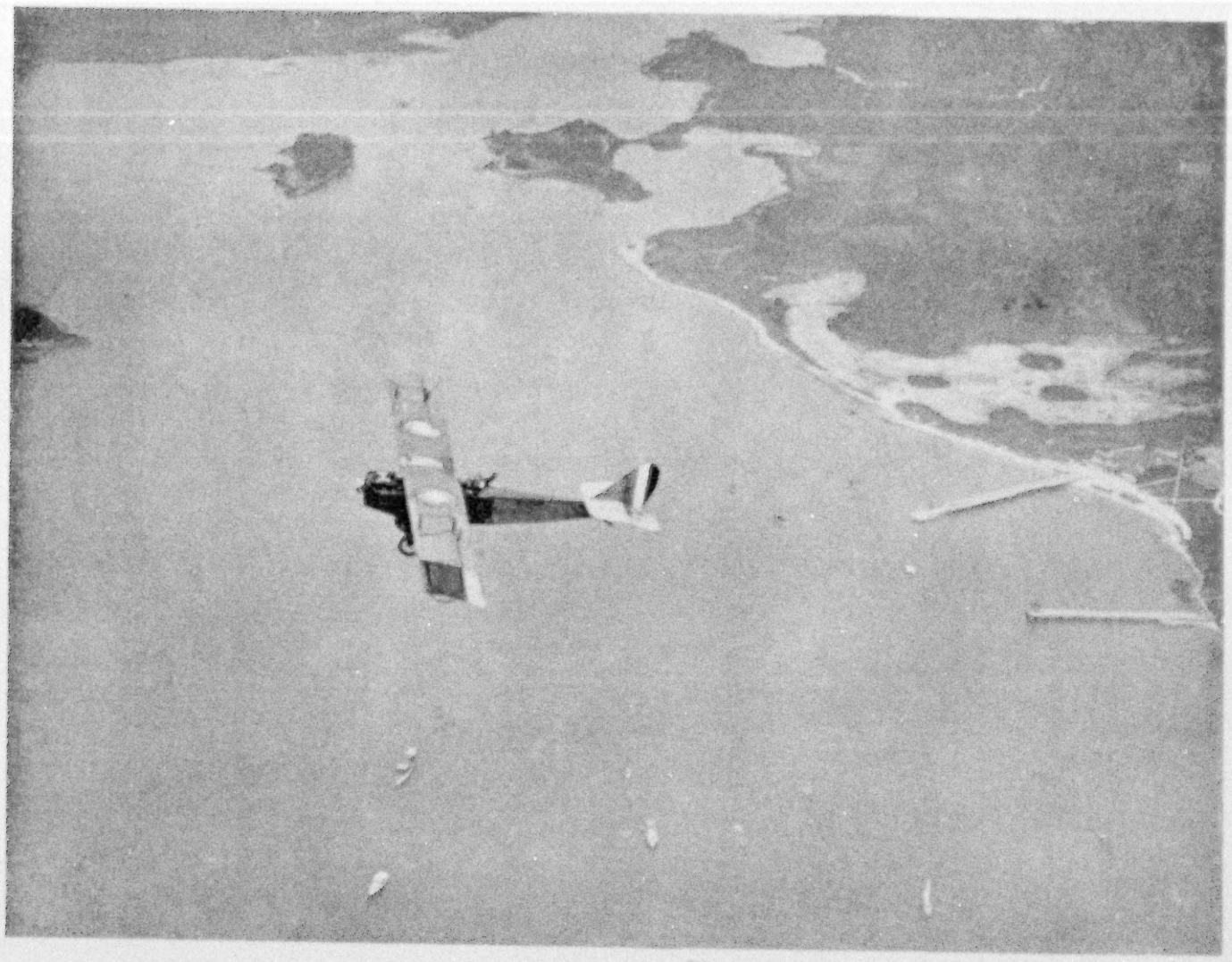
The "Lone Star State" derives its name from an Indian word meaning "Friends" or "Allies."

Our greatest western stream gives its name to Missouri, and its yellow flow toward its mouth well merits its meaning, "Muddy Water."

The popular meaning often given to Arkansas is "Bend or Bow in the Kansas," but it is manifest that this is erroneous, for this river does not enter the State. One of the Indian tribes of that region bore this name, which was written by early French explorers as "Alkansia" or "Alkansas" and in many other forms. The meaning of the word has been lost. In 1808 certain pioneers resident in Arkansas County of Missouri Territory petitioned Congress to establish the Territory of Arkansas; hence these men are the ones who perpetuated the Indian name.

The wide plains of the Dakotas were the home of the Sioux or Dakota tribes, and this name, which, according to dialect, was also written "Lakota," "Lahkota," or "Nakota," and signifies "Allies," was used as the common name of all the confederated Sioux tribes.

The Sioux tongue also gives us Nebraska, an Otoe Sioux word meaning "Shallow Water" or "Broad Water," terms descriptive of the river for which the State is named. For the perpetuation of this name we are indebted to Secretary of War Wilkins, of President Tyler's Cabinet, who in 1844 suggested



Photograph from Publishers' Photo Service, Inc.

A PHOTOGRAPH TAKEN IN FLIGHT FROM STAMFORD, CONNECTICUT, TO MINEOLA, LONG ISLAND

The Nutmeg State derives its Indian name from Quonoktacut, which the aborigines called the river now known as the Connecticut.

that the Nebraska River (now known as the Platte) would furnish a suitable name for the territory then being formed.

The State of Kansas was named for an Indian tribe which inhabited that region and lived along the river to which it gave its name. The Kansas or Kanza Indians were of the Sioux family and their name means "Wind People" or "People of the South Wind."

Oklahoma also bears a tribal name, taken from the Choctaw tongue. It has the peculiarly significant meaning of "Red People."

WYOMING'S NAME ORIGINATED IN PENNSYLVANIA

It is a strange fact that a valley in Pennsylvania, famed for a Revolutionary massacre, and a far western State should bear the same name; yet the latter is named for the former. Two meanings, both well supported by competent authorities, have been given to the word Wyoming. One is that it is a corruption of a Delaware or Leni-Lenape word, "Maugh-wau-wama," meaning "Extensive Plains." The other interpretation which has been put upon it is "Mountains with Valleys Alternating." Both of these meanings could be fittingly applied to the State of Wyoming.

One of the most highly civilized Indian tribes in the history of the New World, the Aztecs, has given us a State name, for our southern neighbor derives her name from the word "Mexitli," an Aztec tutelary divinity; hence New Mexico. Another meaning given to this word is "Habitation of the God of War."

A small southwestern tribe, the Papagos, a peaceful people and sadly harassed by the warlike Apaches, gives us the name of Arizona. It is taken from a

TENNESSEE, LIKE MANY OTHER STATES, TAKES ITS NAME FROM ITS PRINCIPAL RIVER

A charming view of the Tennessee River as seen from Signal Mountain. At the extreme right is Lookout Mountain. Tennessee is a name of Cherokee origin and came from a village, Tanasse, inhabited by this great southern tribe of Indians.

XUM

Photograph by Moser & Son

A VIEW OF THE OHIO RIVER FROM ONE OF CINCINNATI'S BLUFFS

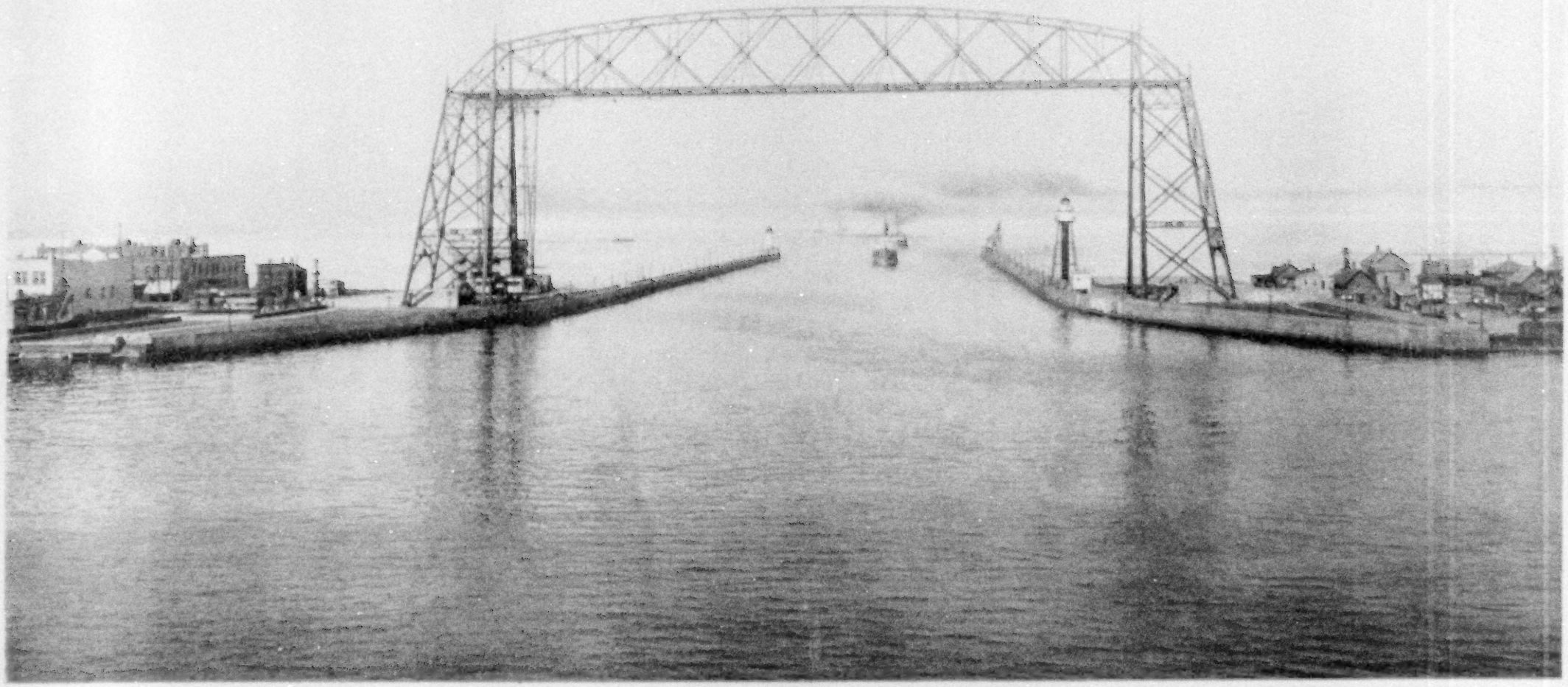
The Buckeye State takes its name from its principal river, which once bore a long Indian name meaning "Beautiful River."

Photograph from the Chicago Architectural Photo Company

THE ART INSTITUTE, CHICAGO, ILLINOIS

Illinois has two sobriquets—the "Prairie State" and the "Sucker State." Its name is of Indian origin, being taken from the Illini tribe, meaning "men," to which the French added their termination, "ois."

XUM



Photograph by L. P. Gallagher

LOOKING OUT INTO LAKE SUPERIOR THROUGH THE ENTRANCE TO THE HARBOR OF DULUTH, MINNESOTA

The "Gopher State," whose motto is "Star of the North" (L'etoile du nord), has a name of Sioux Indian origin, meaning "Cloudy water" or "Sky-tinted water."

Photograph by George E. Hall

A MISSOURI HAMLET NEAR THE FOOT OF THE OZARK MOUNTAINS

"Muddy Water" is the English equivalent of the Indian word Missouri, the river which lends its name to the State.

XUM

Photograph from U. S. Forest Service

BALD CYPRESS AND A GROUP OF "KNEES": ST. FRANCIS RIVER, ARKANSAS

This peculiar species of cypress, found in the southern United States and Mexico, grows in low-lying lands. It sends out its great roots for a considerable distance; then these roots send up "knees," as they are called, which serve as "breathing organs." Known in popular parlance as the Bear State, Arkansas derives its name from that of an Indian tribe, Alkansia or Alkansas.

Photograph by Frederick I. Monsen

INDIAN CHILDREN PLAYING IN A POOL AT ORAIBI, ARIZONA

According to most authorities, the State name, "Arizona," is derived from an Indian word meaning "Place of the Small Springs." Others trace its origin to the Aztec word Arizuma, meaning "silver bearing."

Photograph from George R. King

A LUMBER CART IN THE ZUNI MOUNTAINS OF NEW MEXICO

"Habitation of the God of War" is one of the fanciful meanings given to the name New Mexico, which is derived from that of our neighbor republic on the south. New Mexico's motto suggests a snowball—*Crescit cundo* (It increases by going).

former locality of theirs called "Arizonac" or "Arizonaca," meaning "Place of the Small Springs." It was located a few miles from the present town of Nogales, where, in about 1737, some celebrated nuggets of silver were found. The word has no connection with the meaning, "arid zone," sometimes given it.

The Mormon State, Utah, takes its name from the Ute tribe of Indians, who lived in that section. The origin of the name is unknown.

Idaho is named from an Indian word meaning "Gem of the Mountains"—a most descriptive title for that highland State.

ELEVEN STATES NAMED FOR INDIVIDUALS

It may be of interest to note the various groups into which our State names divide themselves. Eleven were named for individuals, eight for rivers and lakes, five for mountains, six for other natural features, six for various Indian peoples, four for Indian words, five for other lands, and one for a holy day, while two are of unknown origin.

It is to be regretted that our earlier explorers have not been honored in our State names. Columbus, de Soto, Ponce de Leon, La Salle, Marquette, Lewis and Clark, and others might appropriately have States named for them rather than obscure and little-known Indian tribes and English and French sovereigns, who, although we may respect their memory, mean little to us today. And yet, might not Indian terms have been employed in State names with more discretion than they were and with a more fitting sense of the regions named? Penobscot or Kennebec would make better State names than Maine, Chesapeake than Virginia, Potomac than Maryland, and Catawba than the Carolinas. The case of Kanawha *versus* West Virginia has already been noted. Would not Yosemite have been a better State name than California, and might not Oregon better have been named Columbia, thus having both

Photograph by E. F. Guiton

MONT ORGUEIL, ONE OF THE MOST IMPORTANT OF THE INSULAR CASTLES, DATES FROM THE TIME OF THE EARLY PLANTAGENETS: JERSEY

At the time of the establishment of these strongholds, the Channel Islands were divided into great fiefs, both religious and secular, and the seigneurs of the manors, both Norman abbots and Norman knights, were bound by the double service of executing the king's justice and providing armed retainers to defend their lands against the king's enemies. The highest point of this castle is 300 feet above the sea.

the State and its principal river perpetuate the name of the discoverer of the continent?

The "New's," "West's," "North's," and "South's" with which many of our State names are prefixed are inappropriate and would seem to indicate a lack of imagination in naming the various regions. In place of these titles, such representative and well-known Indian names as Yemansee, Adirondack, Alleghany, Monongahela, Altamaha, Miami, Snohomish, Yakima, Tacoma, and many other river and mountain names might have been fittingly used to designate some of our States.

In conclusion, let it be said that it is possible the meaning ascribed to the names of some of the States may be inaccurate. This is chiefly owing to the fact that many of the States were named before the days of historical societies, and in some cases the only sources of information are old letters, crude maps, and Indian legends.

THE CHANNEL ISLANDS

Bits of France Picked Up by England, Whose History is Linked with That of America

By Edith Carey

VICTOR HUGO has called the Channel Islands "Bits of France fallen into the sea and picked up by England." Geographically and racially he was right, but "Morceaux de France" politically they never have been; and Englishmen should realize that while their Spanish fellow-subjects in Gibraltar, their Italian fellow-subjects in Malta, and their French fellow-subjects in Quebec bear witness to England's conquests, their fellow-subjects in the Channel Islands remind them that they themselves have been conquered. And although India, Africa, Canada, and Australia may tell of England's valor and England's enterprise, yet Jersey, Guernsey, Alderney, and Sark—yes, even Herm and Jethou—tell us far more of England's history.

In these islands archæologists will find records of the past dating almost from the very beginnings of the human race.

SECRETS OF THE PAST REVEALED IN JERSEY'S CAVES

In Jersey are two Mousterian caves. The one at La Cotte Ste. Brelade has been opened recently and is now being excavated. Its remains prove that the primitive mammoth (*Elephas trogontherii*), the great Irish elk, the reindeer, the cave hyena, the wolf, and the woolly rhinoceros roamed these shores, which were then attached to the mainland, while dolmens and menhirs in each of the islands, "gray, recumbent tombs of the dead in desert places," bear witness to the existence here of Neolithic Man at least seventeen thousand years ago.

In spite of the fact that Breton saints introduced Christianity into the islands as early as the sixth century, heathen beliefs and practices long continued.

HAUNTS OF WITCHES IN THE ISLANDS

Paganism, unlike more developed forms of religion, had its strength in local traditions and associations, in holy places—wells, trees, and hills—charged with mysterious potencies; and to this day various dolmens and caverns, the Roque Berg and Roche à la Fée in Jersey, the Catioroc, Creux des Fées, and Mont Saint in Guernsey, are known to every Channel Islander as the haunts of witches and evil spirits and the erstwhile abode of fairies. The waters of the "wishing well" of Saint George in Guernsey are still looked upon as magically curative.

Among the distinctive charms of the islands are the dim memories of past races—devil worshippers and sorcerers—which still linger, old traditions of days when "shapes that coiled in the woods

Photograph from Edith Carey

BORDEAUX HARBOR, OVER WHICH WATCHES THE FAMOUS VALE CASTLE: GUERNSEY

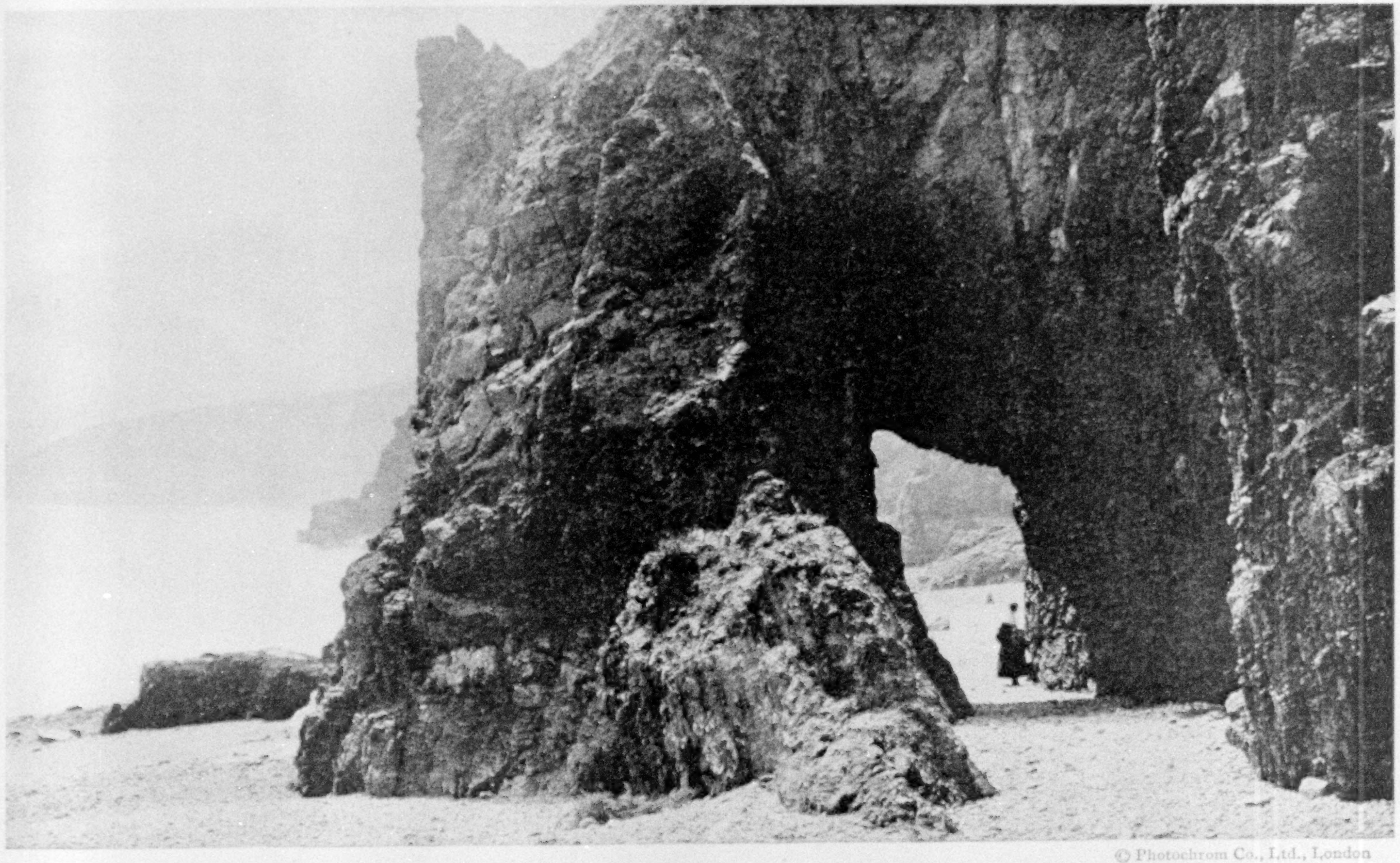
Vale Castle was built by a group of warrior-monks to protect the natives of northern Guernsey from the ravages of pirates.

XUM

Photograph from Edith Carey

ALDERNEY IS SURROUNDED BY THE MOST DANGEROUS CURRENTS AND THE WILDEST SEAS IN THE ENGLISH CHANNEL

Before the days of aircraft and submarine, Alderney was called the "Key of the Channel," which accounts for the extensive fortifications to be found on the island, most of them now obsolete. Seven miles west of Alderney lie the dreaded Casquet rocks, where many ships have been wrecked, including the *Victory*, which went ashore in 1755 with 1,100 men on board.



© Photochrom Co., Ltd., London

THE PICTURESQUE NATURAL ARCHWAY ON THE SOUTH SIDE OF DIXCART BAY, ISLAND OF SARK

Surrounded by cliffs, this sandy bay is one of the prettiest and most frequently visited parts of the island of Sark.

and waters" were worshipped on altars of stone, or by magic wells in sacred groves, or "high places," as the Bible calls them.

In spite of persecutions of church and state these old worships endured; witches and warlocks used to meet at cross-roads or at so-called "Druidic" remains and perform secret rites and ceremonies, which, though degraded and perverted after so many centuries of use, undoubtedly were survivals of obsolete faiths and primitive cults.

A WOMAN CONDEMNED FOR WITCHCRAFT ONLY SIX YEARS AGO

The Puritans of the sixteenth and seventeenth centuries did their best to extinguish these practices, and the records at the Guernsey Greffe show that in that island alone, between the years 1563 and 1639, 20 men and 71 women were imprisoned, banished, or burnt alive in the market-place for witchcraft and sorcery. That these beliefs even now are not extinct is proved by the fact that, as late as January 29, 1914, a woman was tried and condemned by the Guernsey Royal Court for "fortune-telling and witchcraft."

In Jersey and Guernsey these reminders of Stone and Bronze Age cults are supplemented by the more tangible collections of stone axes and implements, of Neolithic pottery, of bronze and iron swords, and by Jersey's golden torque, to be seen in the Museum of the Société Jersiaise at Saint Helier and in the Lukis Museum in Saint Peter Port. There also can be seen evidences of successive Gaulish and Roman occupations in a nearly perfect series of coins unearthed at different periods in the four larger islands.

THE NORMANS ORIGINATED OUR COURTS

It is not until the tenth century A. D. that we discover written records directly dealing with English history; and then we find that hordes of pirates from the far north swept down upon the unprotected islands, burning, pillaging, and conquering, and from the churches the despairing prayer went up: "From the fury of the Normans, Good Lord deliver us!"

It is to these Normans we can ascribe the foundations of our local courts. Their in the open air and presided over by a tribal king who was also the priest of the gods.

There is evidence that originally all our feudal courts were held in the open air, either near sacred stones, or wells, or other consecrated sites. In Guernsey some of the smaller feudal courts still assemble at the same spots, and their officers—senechal, greffier, and vavasseurs—still swear with uplifted hand to be faithful vassals to their liege lord.

Among the enduring monuments of the Northmen are the "hougues," or artificial mounds of earth which they raised over their dead chieftains.

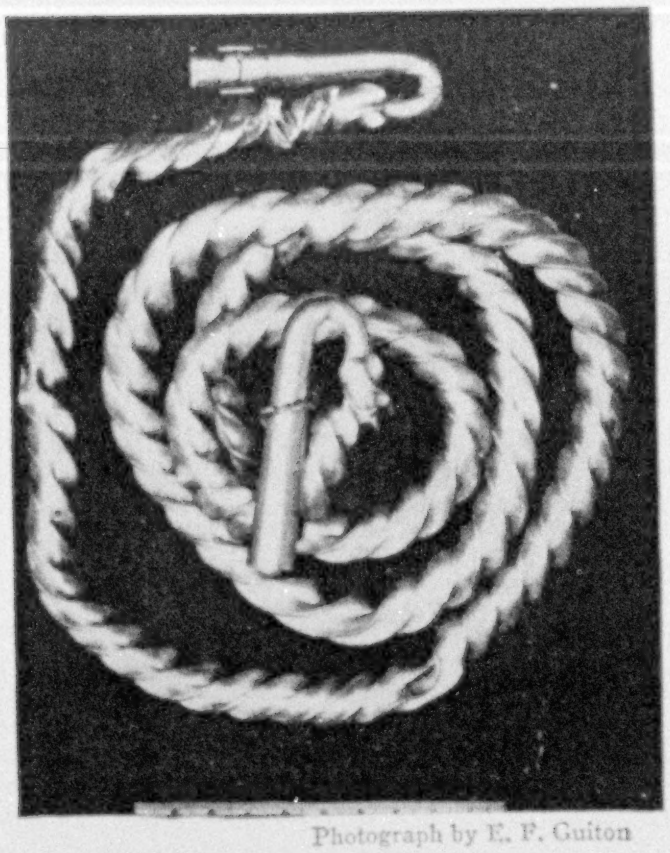
HOW THE DUCHY OF NORMANDY WAS CREATED

By the treaty of Saint Clair-sur-Epte, dating from the first quarter of the tenth century, Charles the Simple of France granted to the Scandinavian Jarl Rollo, King George's famous ancestor, the land, including the Channel Islands, situated "on the seacoasts of the Bretons"; and thus the Duchy of Normandy came into being.

Later documents show that in 1066, when the soldiers of William, Duke of Normandy, marched in triumph (the last alien enemies to do so) through London streets, the islands were already divided into parishes; churches had been endowed and built; the Norman language, laws, and customs were well established; Grosney Castle in Jersey and the Château des Marais in Guernsey were in existence, and Norman abbots and barons practically divided the land and wealth of the islands between them.

This connection with Normandy lasted unimpaired up to the days of King John, until the year 1204, when continental Normandy was lost to him forever. After that date, although the islands politically belonged to England, yet their language, their laws, and their customs remained as before and have continued, with very little alteration, to this day.

For instance, the "Clameur de Haro," which was abolished in Normandy in 1583, can still be, and occasionally is, resorted to by any Channel Islander who thinks his property encroached upon or



Photograph by E. F. Guiton

GOLD TORQUE FOUND IN THE SAND AT SAINT HELIER, JERSEY

This twisted neck chain is one of many reminders of Roman and Gaulish occupation of the Channel Islands.

his rights infringed by the action of another.

A PICTURESQUE MEDIEVAL CUSTOM

The procedure is as follows:

In the presence of two witnesses, generally the constables of the parish, the plaintiff, while kneeling on the ground, cries: "Haro! Haro! Haro! à l'aide mon Prince! on me fait tort!" and then he repeats the Lord's Prayer in French. This is considered tantamount to an injunction to stay proceedings until the case is tried before the Royal Court.

Antiquaries are divided as to whether "Ha Ro" implies Ha Rollo, Normandy's first duke, and therefore the prince whose aid is invoked, or whether it is a survival of an even older custom which was in common use in Neustria long before the Norman invasion by Rollo and his Northmen. If the latter be the explanation, the word "haro" is derived from the Frankish verb *haran*, to shout, and is thus nearly akin to the English word "hurrah."

Norman in race, in language, and in laws, it can be imagined what a wrench it must have been to the islanders to be forcibly severed from Normandy. Many of the feudal lords, who held land both on the mainland and in the islands, took the side of the French king, and therefore their lands in the islands escheated to the King of England and formed the Fief le Roi, for which His Majesty still appoints a receiver general in each bailiwick to collect his feudal rents, and these are still paid, either in "quarters" of corn or their equivalent in money, for his "rents," or in fowls for his "poulage."

But among the Norman nobles the de Carterets, then among the largest landowners in Jersey, and Pierre de Préaux, governor of all the islands, remained faithful to England. The latter contrived that these islands, alone of all King John's continental possessions, should remain English, and they were ratified to the Crown of England by the Treaty of Westminster of 1259, which was again confirmed by the Treaty of Bretigny of 1360.

THE CHANNEL ISLANDS HAVE NEVER BEEN UNDER THE FRENCH CROWN

So the Channel Islands have never passed under the Crown of France, but have been inherited continuously by the kings of England as successors of the dukes of Normandy, in spite of continual invasions by the French.

The islanders from time to time secured charters exempting them from taxation without their consent, and which granted them the privilege of free trade with England, of local jurisdiction in all matters civil and criminal, and security from the encroachments of English law.

In spite of the political separation of the islands from Normandy in 1204, ecclesiastically they still remained in the Norman See of Coutances until the Reformation. It was not until 1568 that they were legally transferred to the diocese of Winchester.

But the Protestantism of the islanders was founded on Calvinism and was quite unconnected with the Church of England. It was not until 1620 in Jersey and 1660 in Guernsey that Episcopalianism was, with great difficulty, established and the Book of Common Prayer officially came into use.

Up to the era of the English civil wars, the political and social history of the islands ran on practically parallel lines.

Many insular families owned manors and estates both in Jersey and Guernsey; and Guernsey de Beauvoirs, de Garis, de la Courts, Le Feyvres, Le Marchants, Perrins, de Vics, and Careys intermarried with Lemprières, de Carterets, de St. Martins, de Soulemonts, Du Maresqs, de la Mares, and Paynes; while in 1549 Hellier Gosselin, and in 1601 Amias de Carteret, both Jerseymen, were respectively appointed bailiffs of Guernsey.

THE GREAT CLEAVAGE

But in the seventeenth century the great cleavage between Jersey and Guernsey took place.

Guernsey, impelled to the popular cause by its more pronounced Presbyterianism, by the feeling of betrayal which the Stuart régime in that island had produced, and strongly influenced by three prominent islanders, Peter de Beauvoir, James de Havilland, and Peter Carey, declared for the Parliament.

Jersey, as strongly influenced by its great feudal family of de Carteret, remained loyal to the royal cause, and in 1645 the Jersey States proclaimed their continued adherence to the king.

In the following year the Prince of Wales (afterwards Charles II) sought refuge in Jersey, arriving from the Scilly Islands; and Jersey, after the execution of Charles I, was the one place in the United Kingdom to proclaim him King of England. Shortly after his proclamation he again visited the island, and was supported both with men and money by Sir George Carteret and the majority of the islanders.

Not only did the Jerseymen fit out numerous privateers to cruise against the commerce of England, but they surreptitiously provisioned and helped Castle Cornet in Guernsey, which, under its royalist governor, bombarded Saint Peter Port and for nine long years stopped all ships entering or departing from Guernsey harbor.

Although it is nearly three hundred years since Jersey and Guernsey were at open war, yet the old rancor still lingered until the World War swept away all smaller misunderstandings, and all Channel Islanders, with the rest of Britain's sons, became brothers-in-arms.

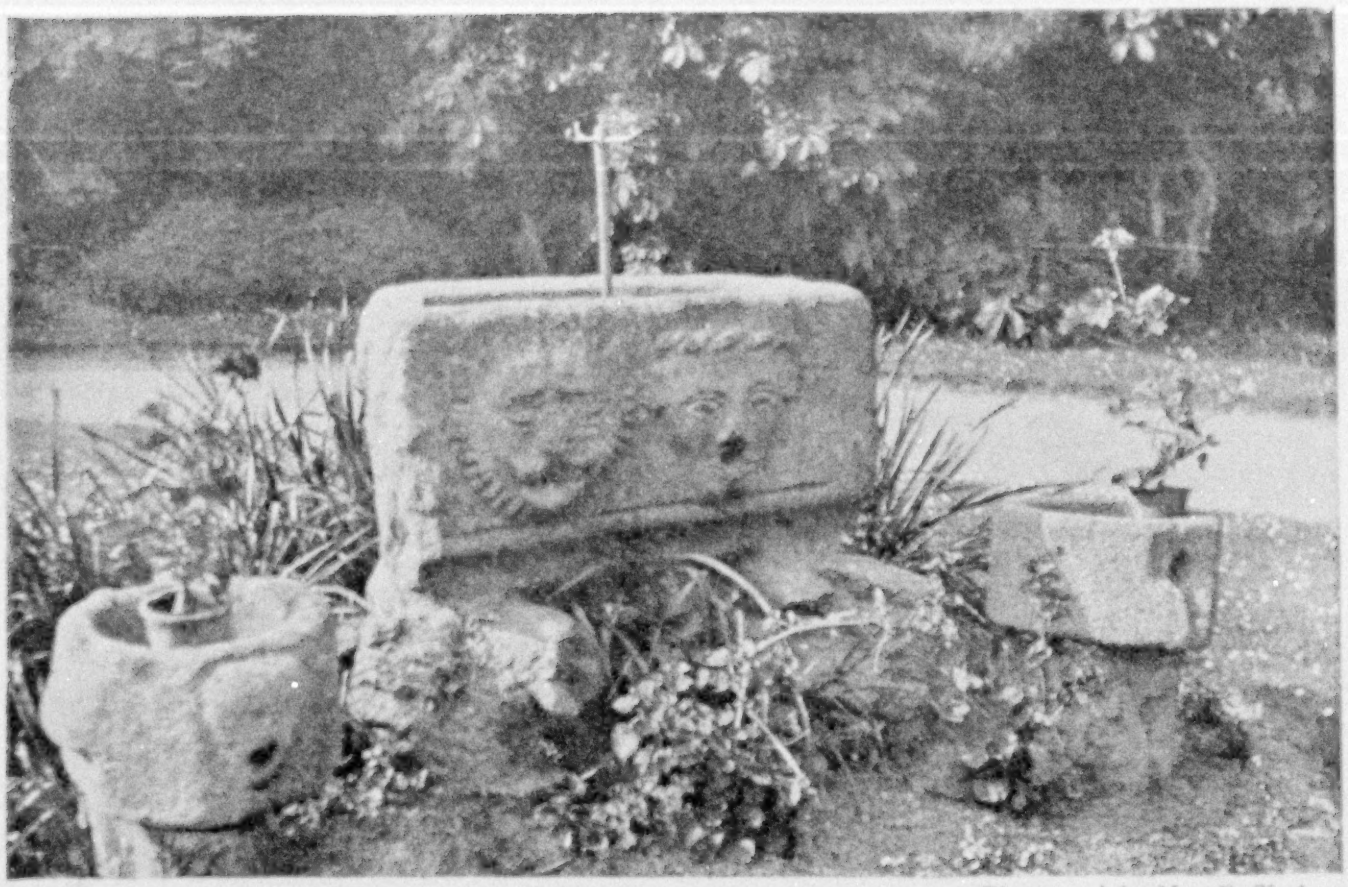
Photograph by Alfred Dobree

THIS MONOLITH WAS REVERENCED BY THE NATIVES OF GUERNSEY AS RECENTLY AS THE FIRST HALF OF THE NINETEENTH CENTURY

Note the diagonal crack across it, where it was broken in half by order of the church wardens in 1846, as it was thought that the people paid too much "superstitious reverence" to this block of granite carved into the rude representation of the head and bust of a woman. At one time a shallow stone trough, said to have been worn down by the knees of worshipers, stood in front of it.

CHARLES II GAVE THE CAROLINAS AND NEW JERSEY TO CARTERET

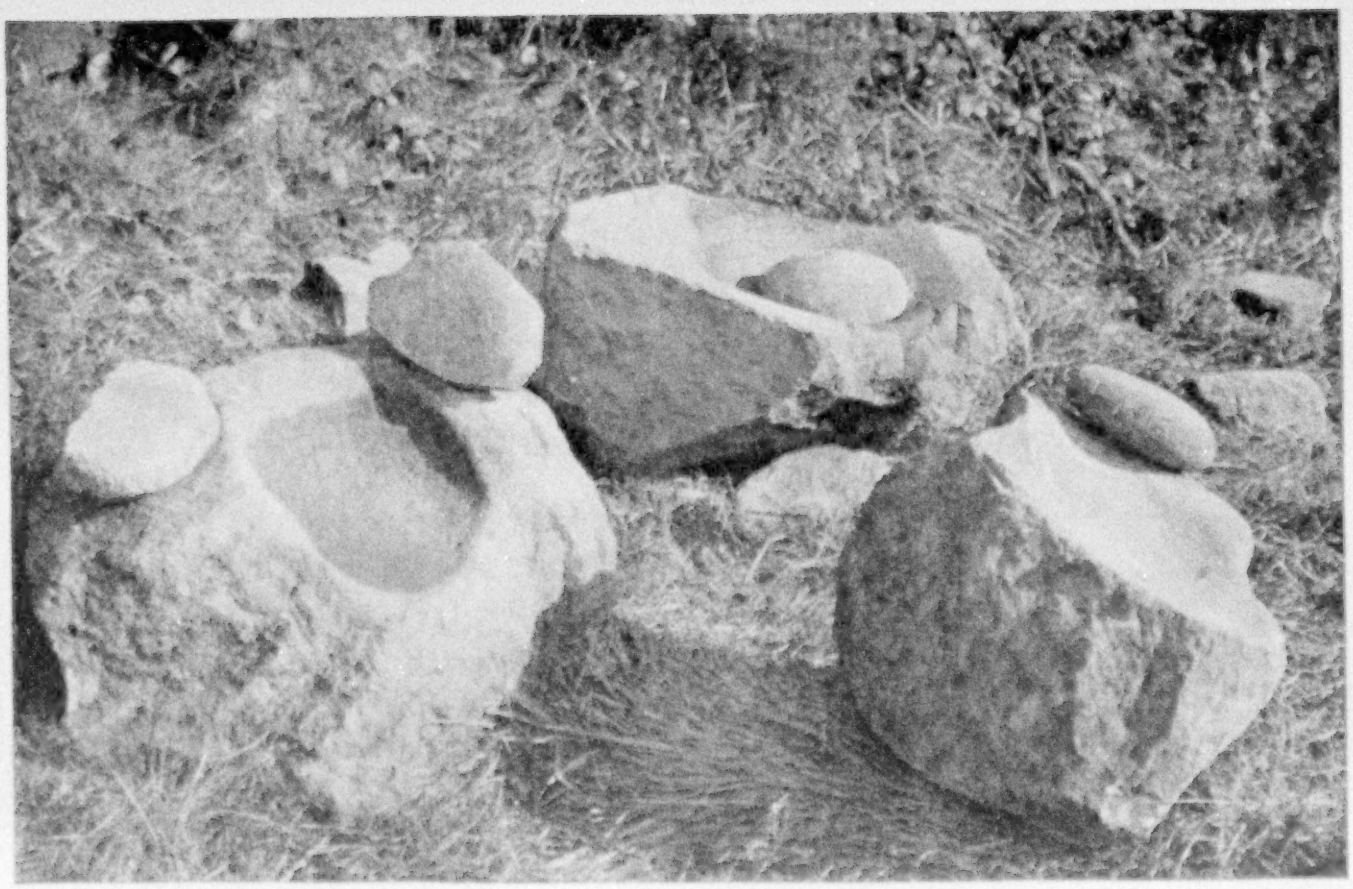
When, in 1660, Charles II was restored to the English throne, he was not ungrateful to the Island of Jersey and to the family which had so befriended him in his exile. He presented the Jersey States with a beautiful silver gilt mace,



Photograph by Mrs. F. Clarke

AN OLD FONT TAKEN FROM THE CASTEL CHURCH, GUERNSEY, WITH REPRESENTATIONS OF THE SUN AND MOON CARVED UPON IT

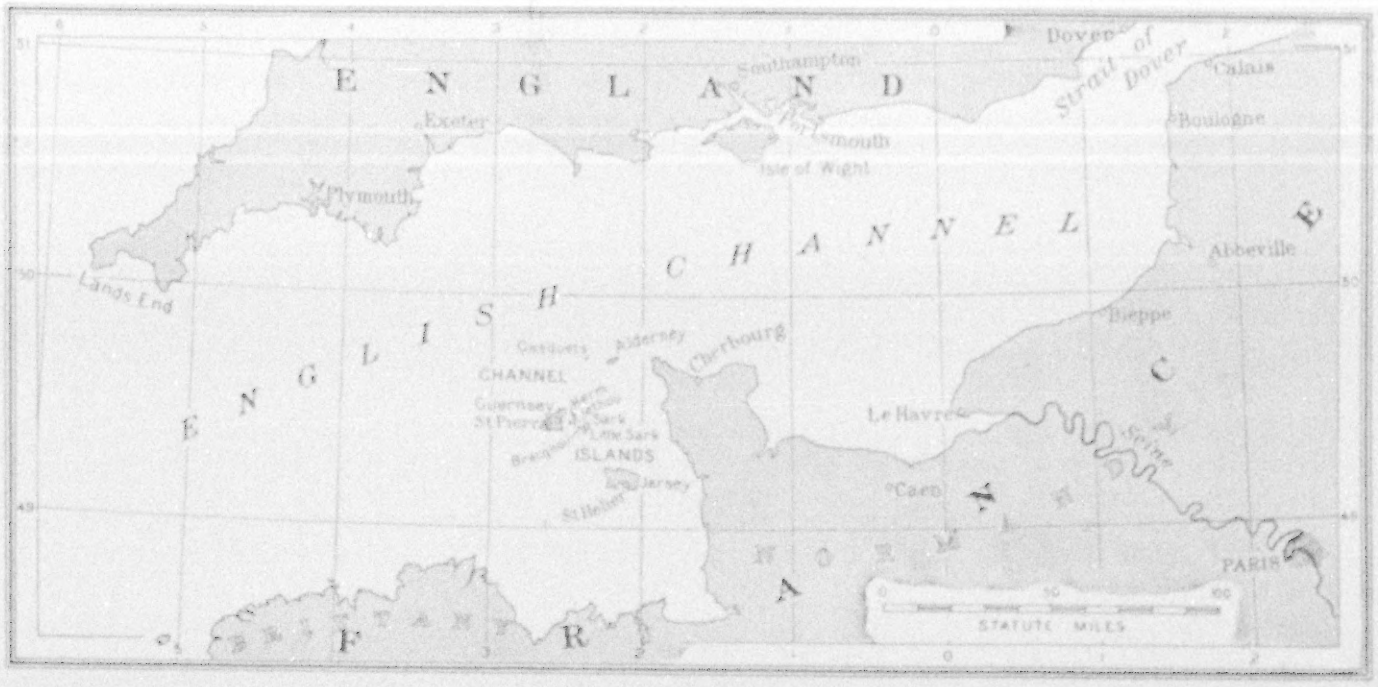
On each side of the font are specimens of the old feudal corn-measures.



Photograph by E. F. Guiton

ANCIENT QUERNS, FOR CRUSHING AND GRINDING GRAIN, FOUND AT THE HOUGUE MAUGER, SAINT MARY, JERSEY

"In the Channel Islands archæologists find records of the past dating almost from the beginnings of the human race."



Drawn by A. H. Bumstead

A MAP OF THE CHANNEL ISLANDS, SHOWING THEIR GEOGRAPHICAL RELATION TO FRANCE AND ENGLAND

and, among other privileges, granted to Sir George Carteret those lands in America which were named by him Carolina, after his royal master, and New Jersey, after his island home. (See "The Origin of American State Names" in this issue of THE GEOGRAPHIC.)

When Sir George was at Boston as Royal Commissioner he met the two Frenchmen, Medard Chouart and Pierre Radisson, who had tried so long and so unsuccessfully to interest the French Government in the development of the Hudson Bay territory. His quick mind realized the advantages to be gained, and he induced them to return with him to England, where he secured them an interview with Prince Rupert, the king's cousin, whose interest was at once awakened, and on May 2, 1670, the charter of the Hudson Bay Company was signed and sealed by the king.

One of the few Guernseymen who had remained loyal to the Stuarts was Sir George's cousin, Sir Edmund Andros, Seigneur of Sausmarez (grandson of the Thomas Andros who married Elizabeth de Carteret). Brave, capable, and energetic, he was made Governor General of the Province of New York in 1674 and Governor-in-Chief of New England in 1686, while in 1692, although Captain-General and Vice-Admiral of England, he was also made Governor of Virginia and all the American Colonies, and wrote his name in American history both for good and ill.

RALEIGH ENCOURAGED THE ISLANDERS TO COME TO AMERICA

But Carteret and Andros are not the earliest links which bind the Channel Islands to the American Continent. Sir Walter Raleigh, who was Governor of Jersey in the days of Queen Elizabeth, encouraged the islanders' emigration to Newfoundland, and thus started that codfish trade between North America and Europe which has enriched so many generations of Channel Islanders.*

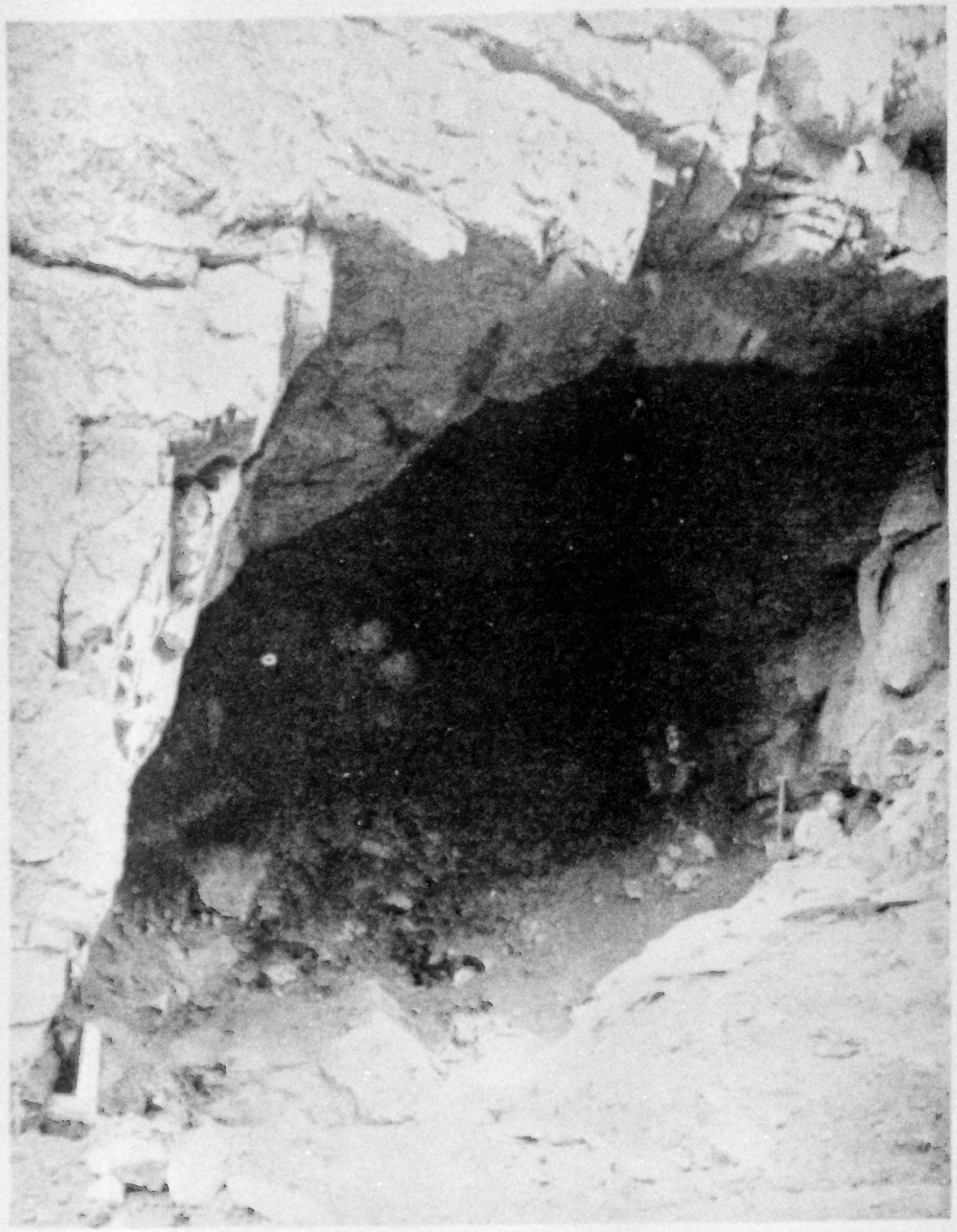
FLOURISHING DAYS OF THE PRIVATEERS

The eighteenth century was, on the whole, an era of wealth and prosperity in the islands. By birth and environment a nation of seamen, both inclination and patriotism led them to take up privateering with avidity.

*The following letter from Sir Thomas Leighton, Governor of Guernsey from 1570 to 1609, written, during a visit to England, to Mr. Peter Carey, acting as his deputy in Guernsey, proves that the intercourse with Newfoundland was of a very early date:

"MR. CARIE:

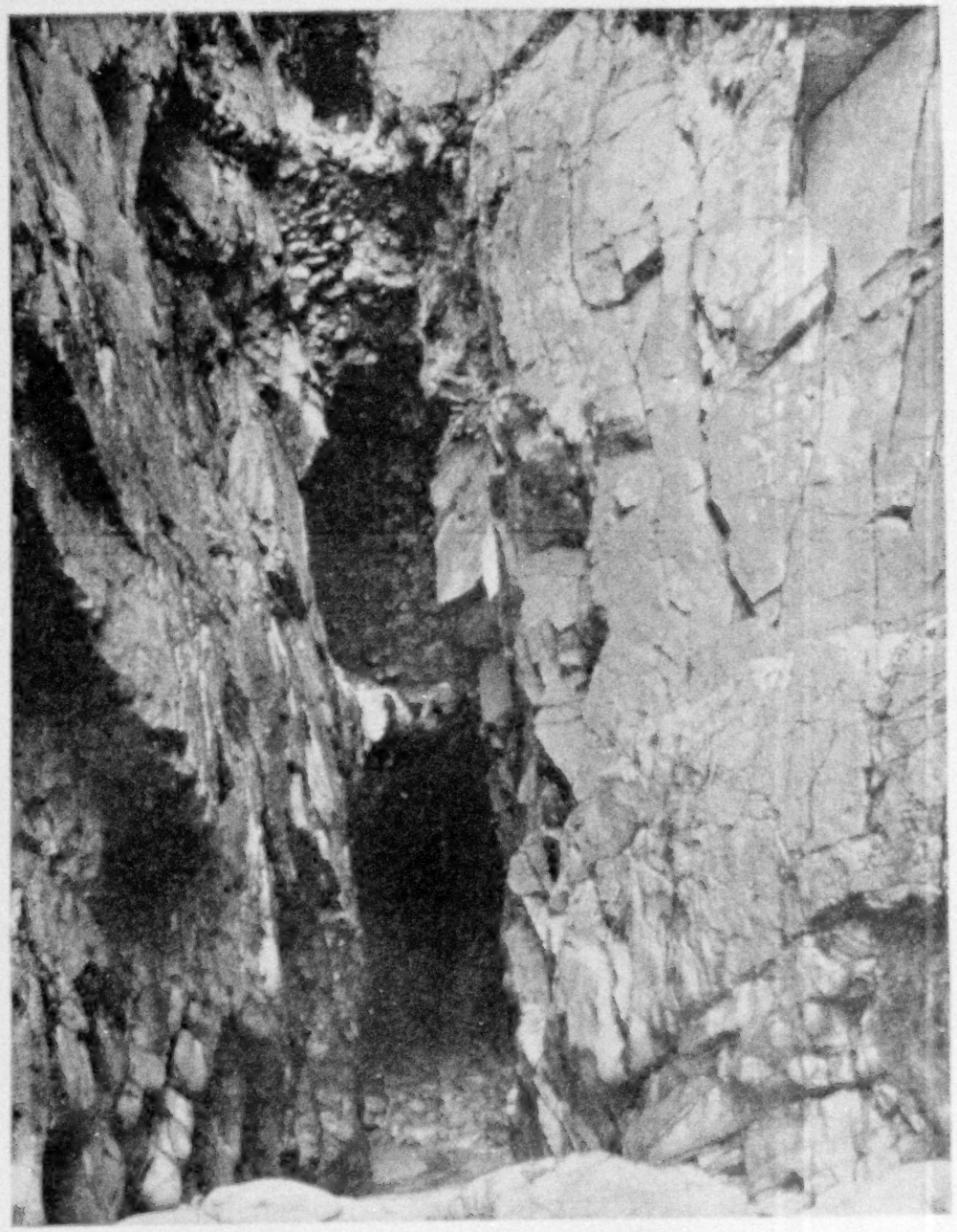
"I receiued your letter by Mr. Pawlet. These are to let you understand that at the Requeste of Denis Rousse I have granted him Lycense to take certaine mariners out of the Island of



Photographs by E. F. Guiton

ONE OF THE TWO MOUSTERIAN CAVES RECENTLY FOUND ON THE ISLAND OF JERSEY

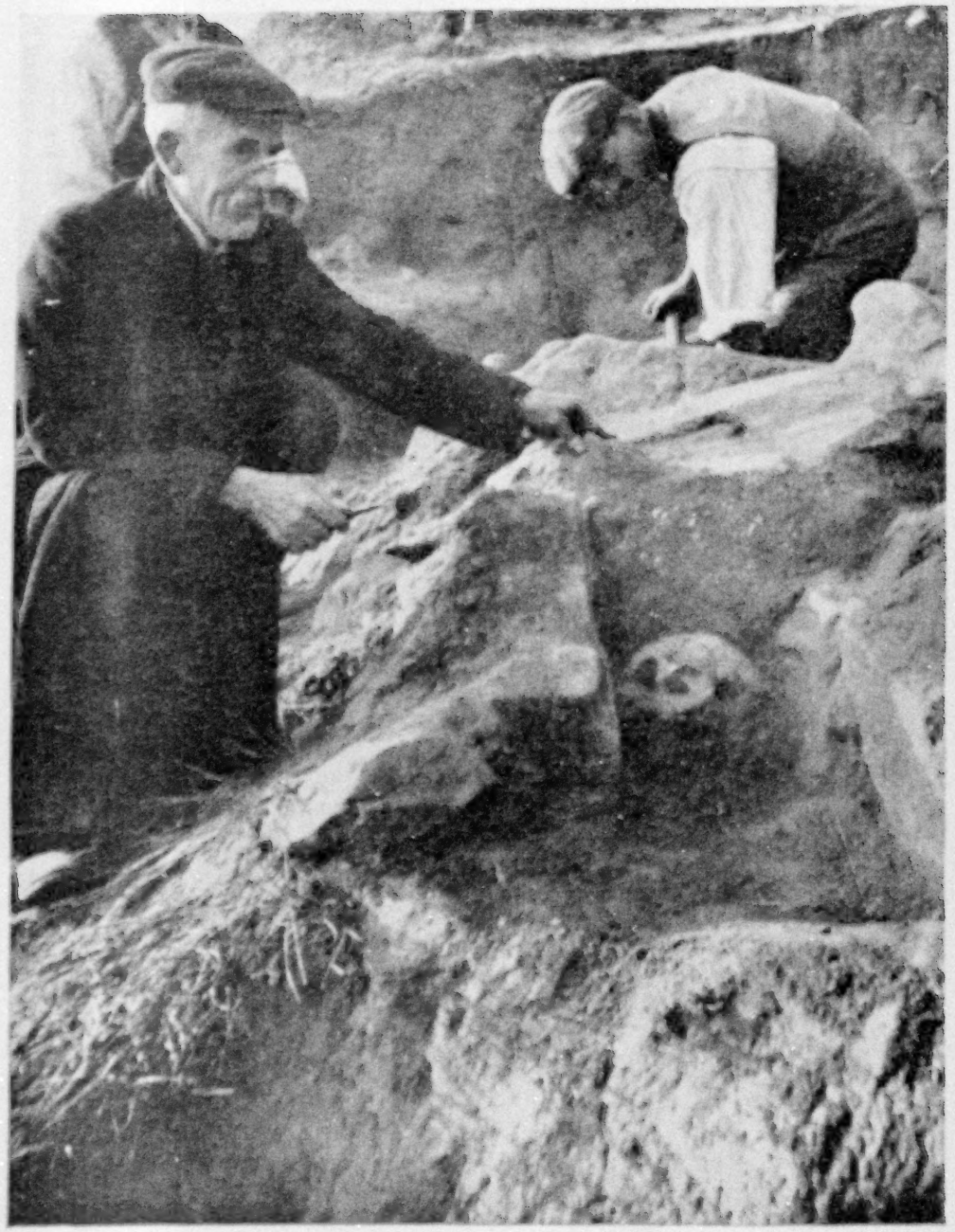
The remains unearthed here prove that the primitive mammoth, the great Irish elk, the reindeer, the woolly rhinoceros, and the cave hyena once inhabited the Channel Islands (see text, page 143). This cave contained the remains of man (Neanderthal), known as *Homo Breladensis*.



A CAVE ON THE NORTH COAST OF JERSEY SHOWING FORMER LEVELS OF THE SEA

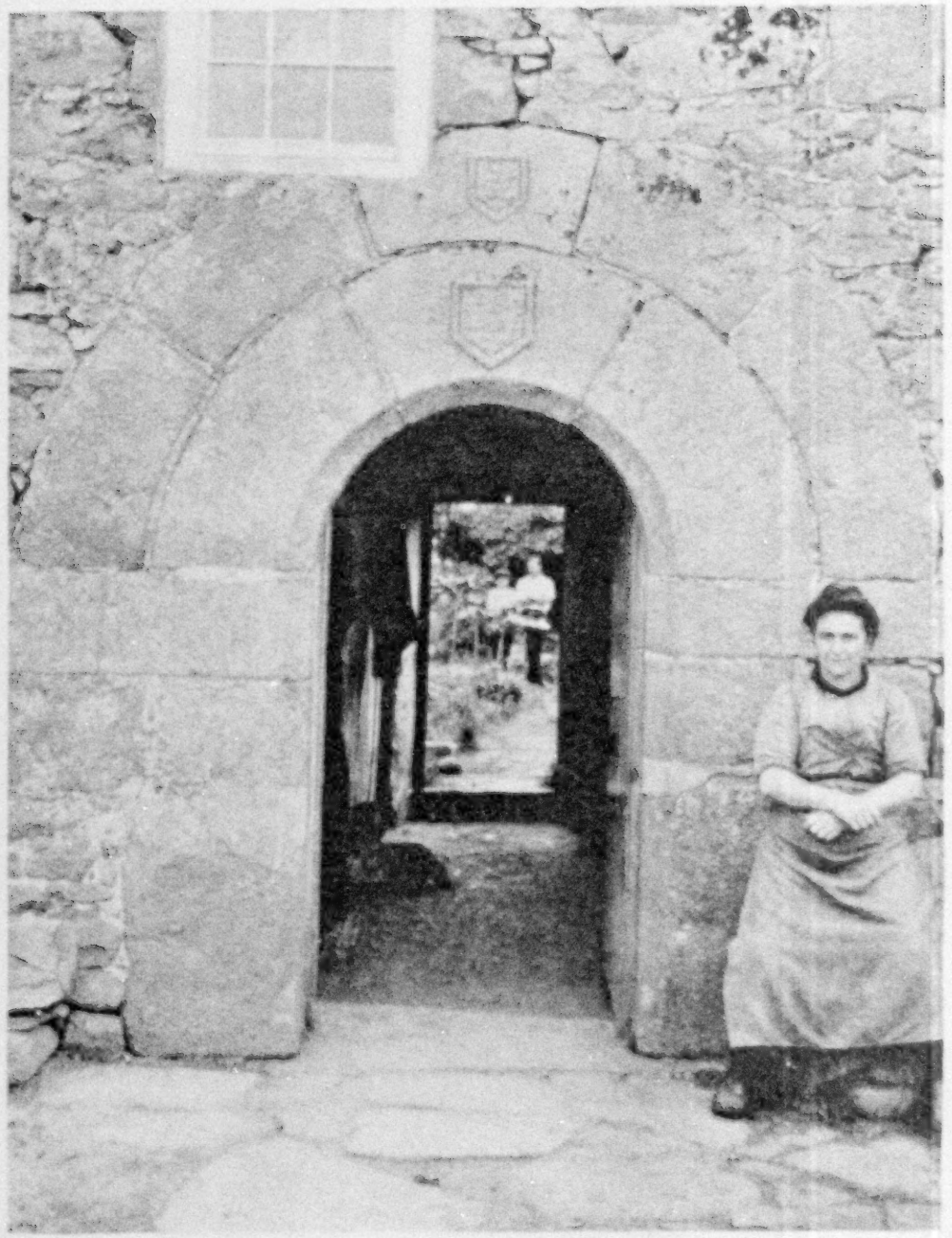
Two levels of raised beaches are left, now much above the present highest tide. The currents are often dangerous to navigation among the islands, which are related geologically to the neighboring mainland of Normandy. Raised beaches are to be seen at several points in the islands.

XUM



Photograph by E. F. Guiton

EXPLORING ONE OF JERSEY'S NEOLITHIC GRAVES AT LA MOTTE



Photograph by Alfred Dobree

A GUERNSEY DOORWAY, ABOVE WHICH APPEARS THE DATE 1596

Photograph by Alfred Dobree

SAUSMAREZ MANOR, THE GUERNSEY HOME OF SIR EDMUND ANDROS

"One of the few Guernseymen who remained loyal to the Stuarts was Sir Edmund Andros. Brave, capable, and energetic, he was made Governor General of the Province of New York in 1674 and Governor-in-Chief of New England in 1686. In 1692 he was made Governor of Virginia and all the American Colonies, and wrote his name in American history both for good and ill" (see text, page 151).

Guernsey, to go on a voiage with him to Newfound Lande for fishe. And also, at the earnest intreatie of my goode friende, Mr. John Hopton of Southampton, have given leave for ten men and two boys more to go the same voyage with Isaiah Berney, Merchant. Therefore I pray you lett them pass if they be willinge. And so with my heartie commendaçons I bidd you farewell.

"Att Court, The 10th March, 1594.

"Your very loveing Friende,

"THOMAS LEIGHTON.

"To my very loveinge Friende, Peter Carey, my lieutente in Guernsey."

Every one who could afford it took out letters of marque, and rich prizes of men-of-war, and merchantmen from every country with whom England was at war—France, Spain, the Netherlands, and "the Rebellious Colonies of America"—were towed triumphantly into Channel Island harbors, until Burke declared in the English Parliament that "so formidable was their enmity and so valuable the assistance they had rendered to England, that they were almost entitled to be called one of the naval powers of the world."

It was not until the Declaration of Paris in 1856, when the nations of Europe agreed that "privateering is and remains abolished," that the hunting of treasure-ships ceased to be a licensed form of sport.

The latter days of the nineteenth century were marked by peace and prosperity for all the islands. In Jersey potato farming brought great wealth to the inhabitants; in Guernsey granite quarries and tomato houses, though marring the island's former picturesqueness and beauty, have increased its riches. The dairymen of Jersey, Guernsey, and Alderney have so increased and improved their breeds of cattle that these are in demand everywhere and are exported to the ends of the earth.

Among these peaceful fishermen and farmers came like a crash the thunderbolt of war. The majority of them knew

Photograph by E. F. Guiton

THE PEOPLE OF JERSEY BEING ADVISED OF THE PASSAGE OF A NEW LAW

On market day, in the royal square, the senior "dénonciateur," or sheriff, in his robe of office, "publishes" the newly passed law by reading it aloud.

no more of Germany and Germans than that a German prince had rented Herm from the Crown for some twenty-five years, and that a German band periodically visited these shores.

THE ISLANDERS RALLIED FOR THE WORLD WAR

But the old patriotism blazed forth undimmed. In the states houses of all the islands it was decided that the old privileges should voluntarily be put in abeyance; that the island militias, after seven hundred years of voluntary service, should be disbanded, and that the islanders should be enrolled in England's armies "for service beyond the seas."

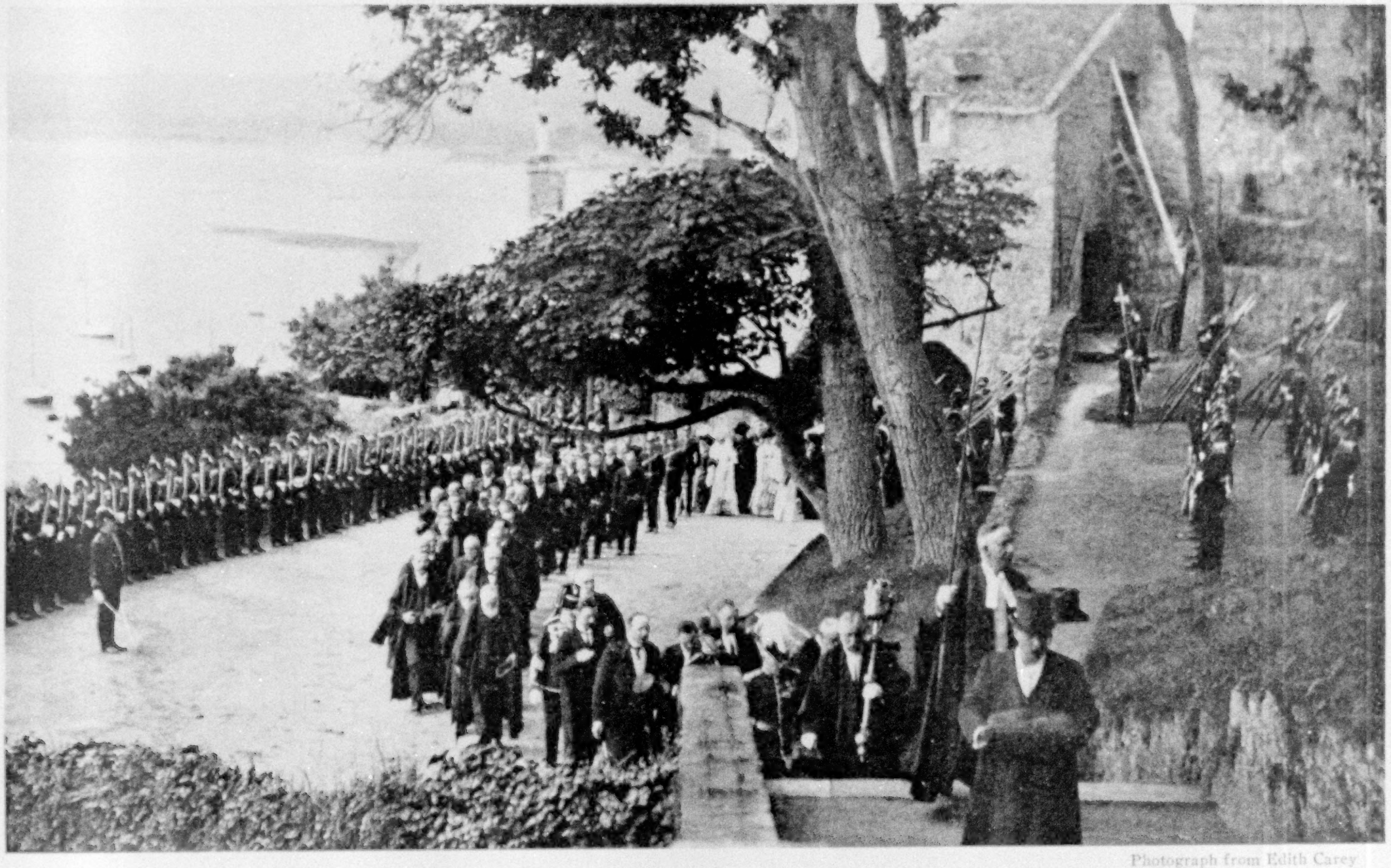
Jersey, with its wooded valleys, its winding lanes, overarched with foliage; its orchards, its miles of glistening sand, its quaint old churches and picturesque granite farmhouses, and dominated always by the magnificent ruins of Mont Orgueil Castle, gives the impression of unbounded prosperity and fertility. Its lands having been owned always by a race of peasant proprietors, the country shows that it has been cultivated for its own sake by men who loved it and not by hirelings.

Naturally enough, so much beauty has bred a race of artists, the most famous being Monamy, Le Capelain, Jean the miniaturist, Ouless, Sir John Millais, and at the present day Messrs. Lander, Le Maistre, and Blampied.

Guernsey, alas, is spoiled, from a scenic standpoint, by miles of greenhouses and acres of quarries. But its cliffs and bays are magnificent, and Moulin Huet is perhaps the most lovely spot in the islands. There are still to be found some wooden walks and lanes, old stone walls and arched gateways, which are as yet unmarred by the utilitarian demands of modern agriculture and industry.

VICTOR HUGO WROTE THREE FAMOUS NOVELS IN GUERNSEY

Saint Peter Port, built on the side of a hill, retains a certain amount of its former picturesqueness; it is traversed by a curious succession of long granite stairways, and, with its high red-roofed houses, has a foreign appearance—"Caudebec sur les épaules de Harfleur," as



Photograph from Edith Carey

THE TAKING OVER OF MONT ORGEUIL BY THE SOCIÉTÉ JERSAISE ON JUNE 28, 1907

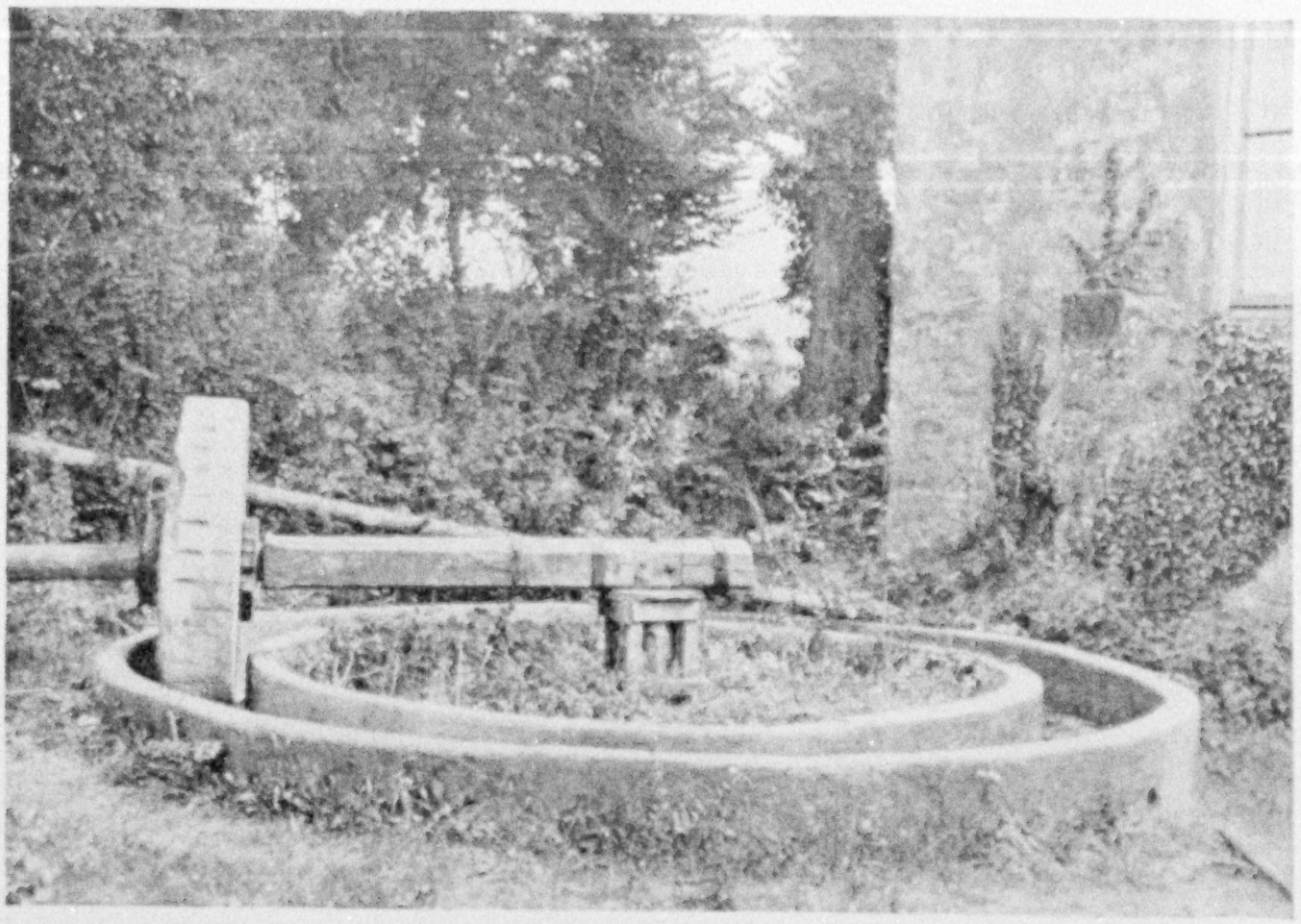
The procession is headed by the Vicomte of Jersey, bearing his wand of office, and followed by the mace-bearer, the Lieutenant Governor, the bailiff, and the members of the royal court. On the right of the photograph stand the halberdiers.

XUM

Photograph by Mrs. F. Clarke

HOLDING THE COURT OF FIEF BEUVAL: GUERNSEY

There is evidence that originally all feudal courts were held in the open air, and in Guernsey some of the smaller courts still assemble in the spots that have been used for hundreds of years. Their officers—senechal, greffier, and vavasseurs—still swear with uplifted hands to be faithful vassals to their liege lord. In the scene shown above the senechal (bailiff) is swearing in a vavasseur.



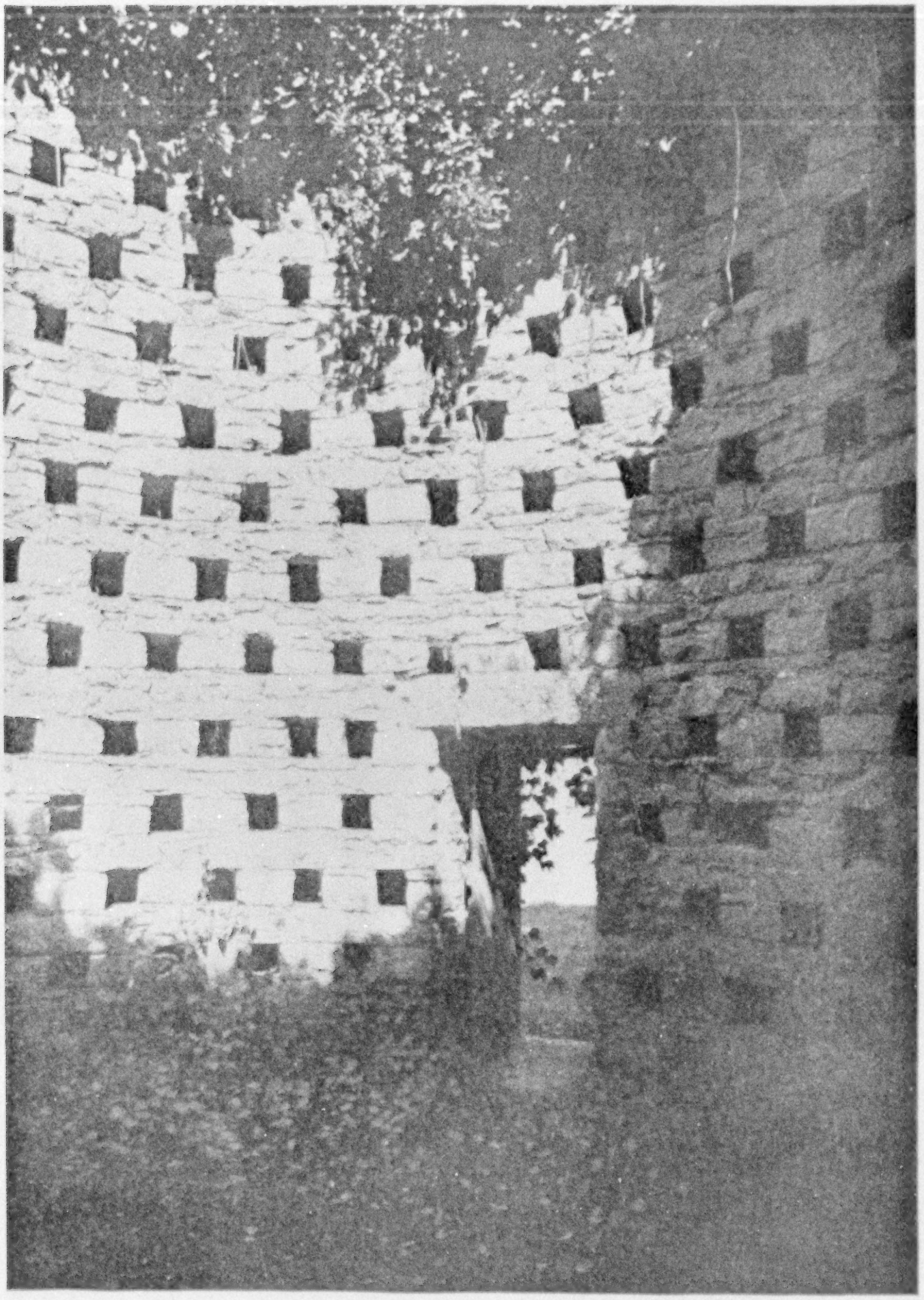
Photograph by Alfred Dobree

A GUERNSEY CIDER MILL

Photograph by E. F. Guiton

REMAINS OF THE OLD PRIORY MONT AU PRÊTRE: JERSEY

In spite of their political separation from Normandy at the beginning of the thirteenth century, the Channel Islands remained in the See of Coutances until the Reformation (see text, page 148).

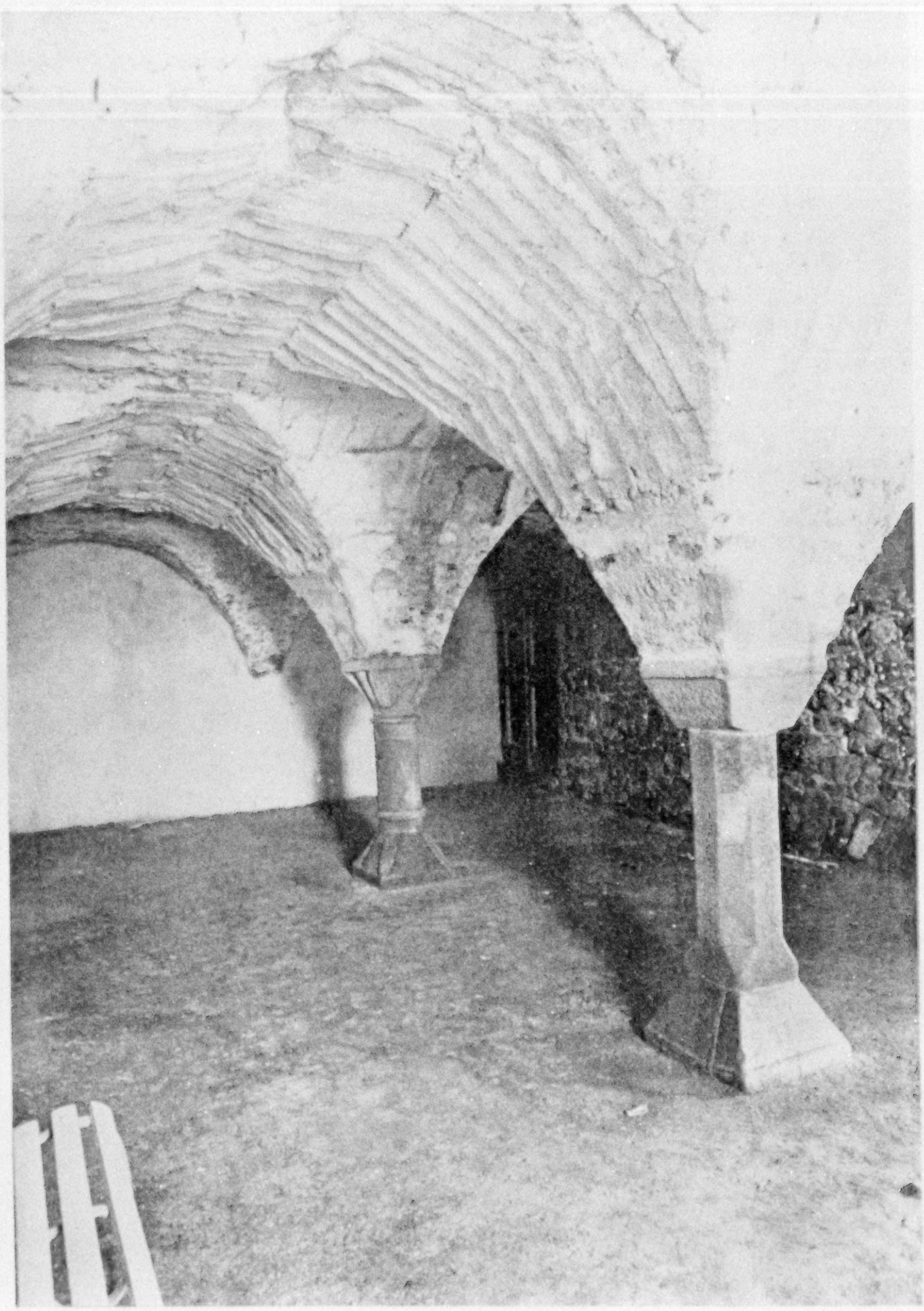


Photograph by Tynan Brothers

INTERIOR OF THE "COLOMBIER," OR DOVECOTE, AT SAMARÉS MANOR, JERSEY

A colombier was one of the most coveted privileges of feudal times, being distinctive of the "droit de chasse," which was a privilege attached to noble fiefs alone. Only a "noble" seigneur could have as a colombier an *isolated* round tower, though by a later concession the lesser seigneurs might have a *tourelle*, or demi-tower, on condition that it be attached to the principal edifice, while those of the third rank of the feudal hierarchy were only allowed to pierce pigeon-holes either in the eaves or gables of their houses.

XUM



Photograph by Tynan Brothers

INTERIOR OF THE FEUDAL CHAPEL OF SAMARÉS, JERSEY

This is an early Norman building of the eleventh or twelfth century, attached to the Manor House of Samarés.

Vacquerie described it when on a visit to Victor Hugo, who was then living in the islands as an exile from France.

It was during the great Frenchman's residence in Guernsey that he wrote much of his poetry and three of his best-known novels—"Les Misérables," "The Man Who Laughs," "The Toilers of the Sea." In commemoration of his exile the French nation brought over and erected a statue to his memory in July, 1914.

The lesser islands, Alderney, Sark, Herm, and Jethou, are comprised in the bailiwick of Guernsey.

Alderney, described by Napoleon as the shield of England, was considered, in the days before aircraft, submarines, and long-range guns had revolutionized warfare, to be the key of the channel. Consequently, during the Napoleonic wars, forts were erected here by the British Government at vast expense.

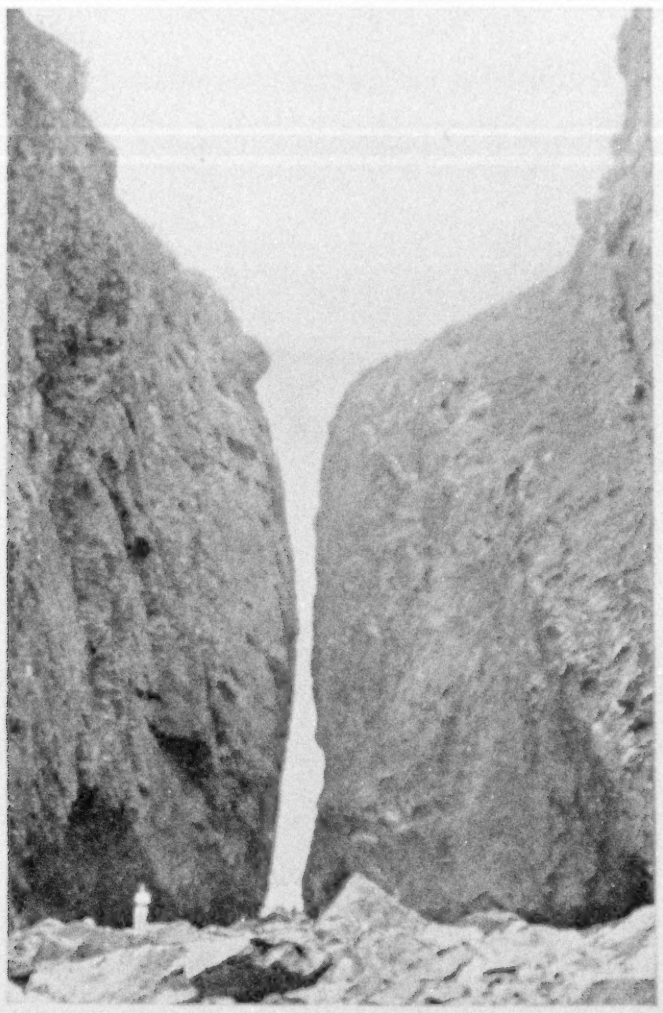
Rugged and inhospitable as the island looks to the wayfarer, it has a savage, untamed beauty denied to the other islands. It is surrounded by the most dangerous currents and the wildest seas in the English Channel.

Seven miles west of Alderney lie the famous Casquet rocks, "where the carcases of many a tall ship lie buried." In spite of many petitions and numberless tragedies, it was not until 1723 that the British Government established a beacon light on these dangerous rocks; and then it was but a coal fire burning upon an armorer's forge and kept alight by bellows.

Naturally, the fiercer the gale the more the light was extinguished by the spray, and the toll of ships so increased that in 1779 this primitive appliance was superseded by an oil light in a copper lantern. Nowadays there is a fog-signal station and a lighthouse with a brilliant revolving light.

SARK THE EPITOME OF CHANNEL ISLANDS BEAUTY

No one can claim to have seen the Channel Islands until he has seen Sark, which is an epitome of the beauty of them all. It contains the wooded valleys of Jersey, the brilliant lichen-covered cliffs of Guernsey, and its own carpet of wild flowers and sea-anemones, while the natural magic of its beauty is supplemented, to the initiate, by the magic-working powers of some of the old inhabitants.



Photograph by G. A. Piquet

A GORGE MORE THAN 100 FEET DEEP, IN THE CLIFFS AT CRABBÉ: JERSEY

Crabbé is a small, almost circular cove, surrounded by very steep cliffs. It is one of the wildest and most desolate places on the north-west coast of the island. This gorge has been caused by the erosion of a vein of greenstone in the granite.

Great Sark is connected with little Sark by "one sheer thread of narrowing precipice" called the Coupée. The island is held from the Crown by feudal right, and its Seigneur, who presides over the local court with the help of his senechal, his prevôt, and his greffier, enjoys autocratic powers unknown elsewhere in Europe.

The two remaining islands of the archipelago are Herm and Jethou, which lie between Sark and Guernsey. They belong to the Crown, having gone through many vicissitudes and having passed through a great variety of hands.

Photograph from Edith Carey

THE COUPÉE, THE MOST CELEBRATED BIT OF CLIFF ON THE ISLAND OF SARK

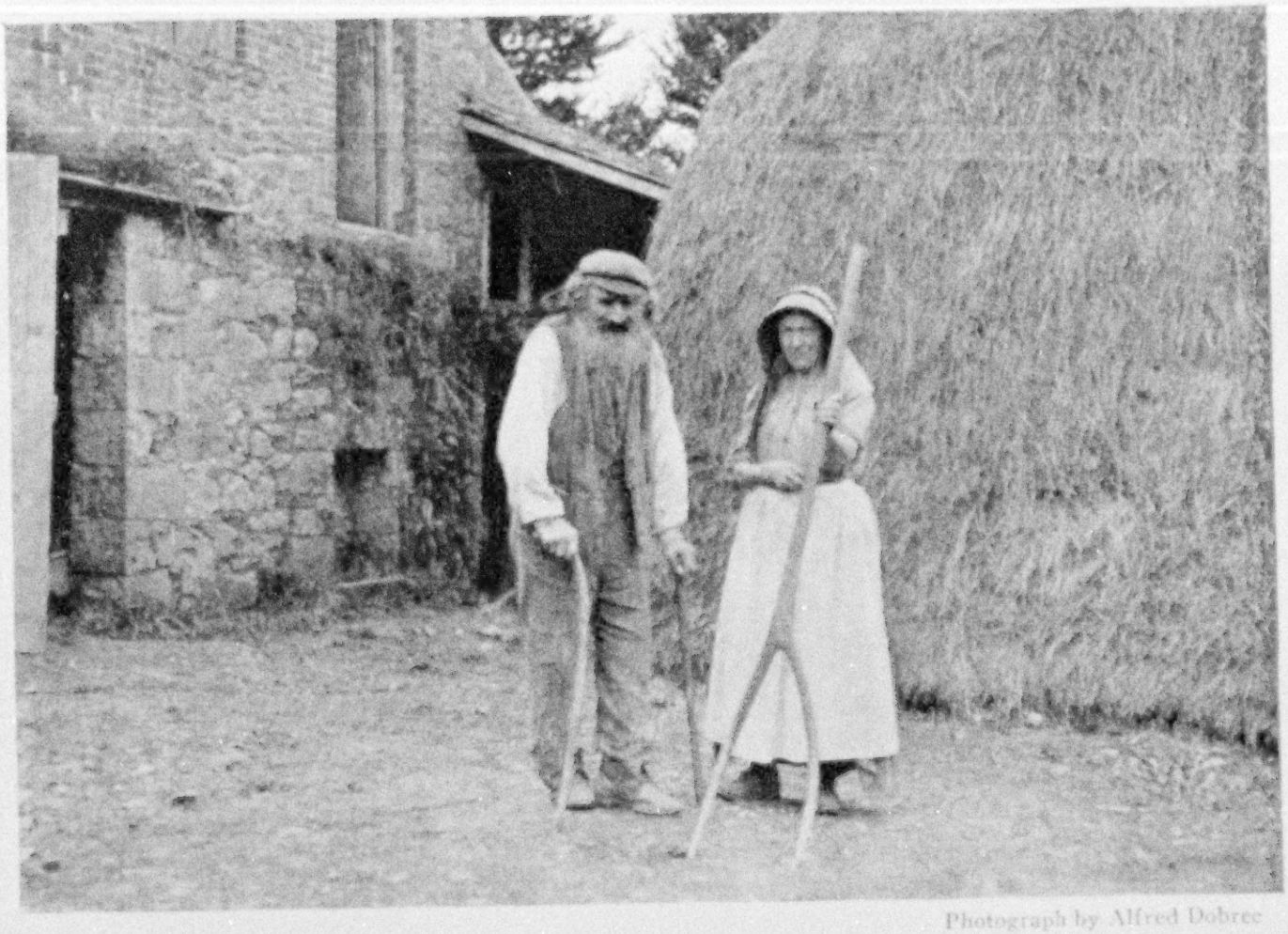
This narrow neck of rock connects Sark with Little Sark "by one sheer thread of narrowing precipice." The road is barely wide enough to permit a carriage to drive over it. The view from this vantage point, 300 feet above the sea, is superb, with the island of Jersey to the east and Guernsey, Herm, and Jethou to the west.

XUM

Photograph by E. F. Guiton

IN THE MIDDLE OF PORTELET BAY STANDS "L'ILE AU GUERDAIN," CROWNED BY JANVRIN'S TOWER: JERSEY

This is one of the many coast defense Martello towers which dot the shores of Jersey, Guernsey, and Alderney. They date from the seventeenth and eighteenth centuries, some of them built at the time of the Napoleonic scare.



Photograph by Alfred Dobree

AN OLD GUERNSEY FARMER AND HIS WIFE WITH A NATURE-GROWN HAY-FORK

Herm is remarkable for two shell beaches, of which even the shingle is composed of minute particles of shell, and is unequaled on the British coasts for the profusion, variety, and rarity of the species there to be found. The last tenant of the island successfully introduced the small species of kangaroo called wallaby.

In each island still lingers the old "patois," a survival of the French, which was once the court language of England as well as of France, while even now there remains a certain individuality about the thoroughbred Channel Islander. To the world in general he asserts himself an Englishman, but in the presence of the English he boasts of being a Jerseyman or a Guernseyman.

Acquaintance proves that each island has its own fauna and flora, its own group of family names.

The coasts present every variety of sea scenery—granite cliffs which even at the lowest tide stand fathoms deep in ever-heaving water; long reaches of sand that, when the tide is out, stretch away for nearly a mile below high-water mark; little creeks where the sand is dotted with black, serrated reefs half covered with seaweed at the ebb and all but covered by the foam of the waves as they fret themselves into yeast-like spray at the flow. Above are cliffs, golden with gorse, starred with marguerites, rose and blue with campions, foxgloves, and bluebells; intersected with tiny valleys, "as if God's finger touched, but did not press."

On the horizon one sees the outline of the other islands, dim and soft through the summer haze, clear and sharp before the coming rain; beyond these the line of the French coast, and all around a sea, indescribably blue in the sunshine, gray and purple and cruel under the clouds.

Above all, each island is crowded with associations. They retain the traditions of old gods, the remembrances of ancient men.

INDEX FOR JANUARY-JUNE, 1920, VOLUME READY

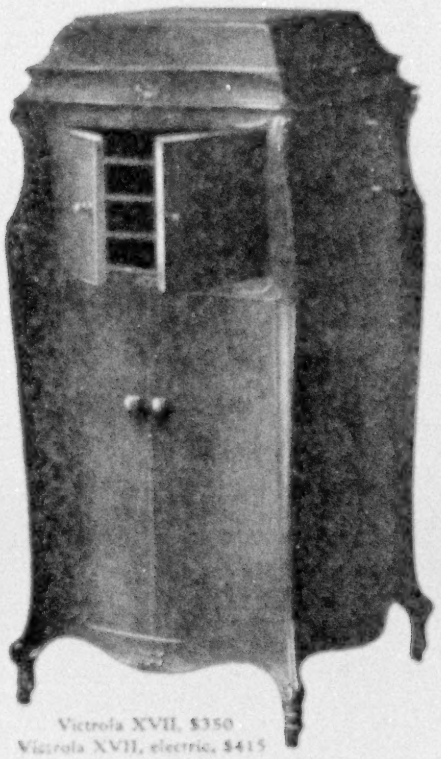
Index for Volume XXXVII (January–June, 1920) will be mailed to members upon request

It is worth your while to know the truth

The Trademark VICTROLA was originated by the Victor Talking Machine Company. It is applied to our various products—Instruments, Records, Styli, etc.—and seeing it on any Talking Machine, Record or accessory you may know that the article is genuine and was manufactured by this Company.

Every talking machine dealer knows this, and you may assume that if you ask a dealer for VICTROLA products and he hands you something not manufactured by the Victor Talking Machine Company, he is attempting to deceive you and is not giving you what you want or the service you are entitled to.

Remember the Trademark VICTROLA cannot be properly or honestly used as referring to goods not manufactured by us.



Victrola XVII, $350
Victrola XVII, electric, $415
Mahogany or oak

This trademark and the trademarked word "Victrola" identify all our products. Look under the lid! Look on the label!
VICTOR TALKING MACHINE CO.
Camden, N. J.

VICTROLA

REG. U. S. PAT. OFF.

Victor Talking Machine Co.

Camden, New Jersey

SERVICE

more complete than ever

TO the *specialized experience* of DWIGHT P. ROBINSON & COMPANY, INCORPORATED, in the design and construction of power developments, steel mills, reinforced concrete and steel structures, there has been added the organization of WESTINGHOUSE, CHURCH, KERR & CO., INC., with its *specialized experience* in the design and construction of industrial plants, railroad work and industrial power plants. This means that we are making available to industrial America the most complete engineering and construction service ever offered.

We solicit undertakings in the design and construction of the following classes of work, for each of which we have corps of trained specialists:

Foundries	Sugar Refineries	Electrification
Shops	Warehouses	Railroad Shops and Terminals
Steel Mills	Office Buildings	Disposal and Filtration Plants
Chemical Plants	Power Stations	Gasoline Extraction Plants
Fertilizer Plants	Hydro-electric Developments	Pipe Lines and Pumping Stations
Factories	Transmission Systems	Harbor and Dock Work

DWIGHT P. ROBINSON & COMPANY
INCORPORATED

Engineers and Constructors

Consolidated with WESTINGHOUSE, CHURCH, KERR & CO., INC.

125 EAST 46TH STREET, NEW YORK

CHICAGO PITTSBURGH CLEVELAND DALLAS

One Man cannot move a Mountain

NO longer does one man finance a great enterprise—thousands of investors *pull together* with their money and confidence.

It is the business of The National City Company, through its more than fifty offices in leading cities, its trained representatives, and by correspondence, to bring the investor and investment opportunities together quickly and conveniently.

A large number of attractive offerings appear on our current purchase sheet. Send for AN 136.

The National City Company

National City Bank Building, New York

Facts for CAREFUL INVESTORS

OUR book "Men and Bonds," giving information on the following subjects, will be sent gladly on request:

Why we handle only carefully investigated investment securities.

The wisdom of purchasing securities from a Company large enough to maintain far-reaching investigation service.

The importance of buying investment securities from a house with over 50 offices and international connections and service.

Why the careful investor selects securities from a broad range of offerings.

How 10,000 miles of National City Company's private wires keep our offices in leading investment centers of the country in constant touch with our New York headquarters.

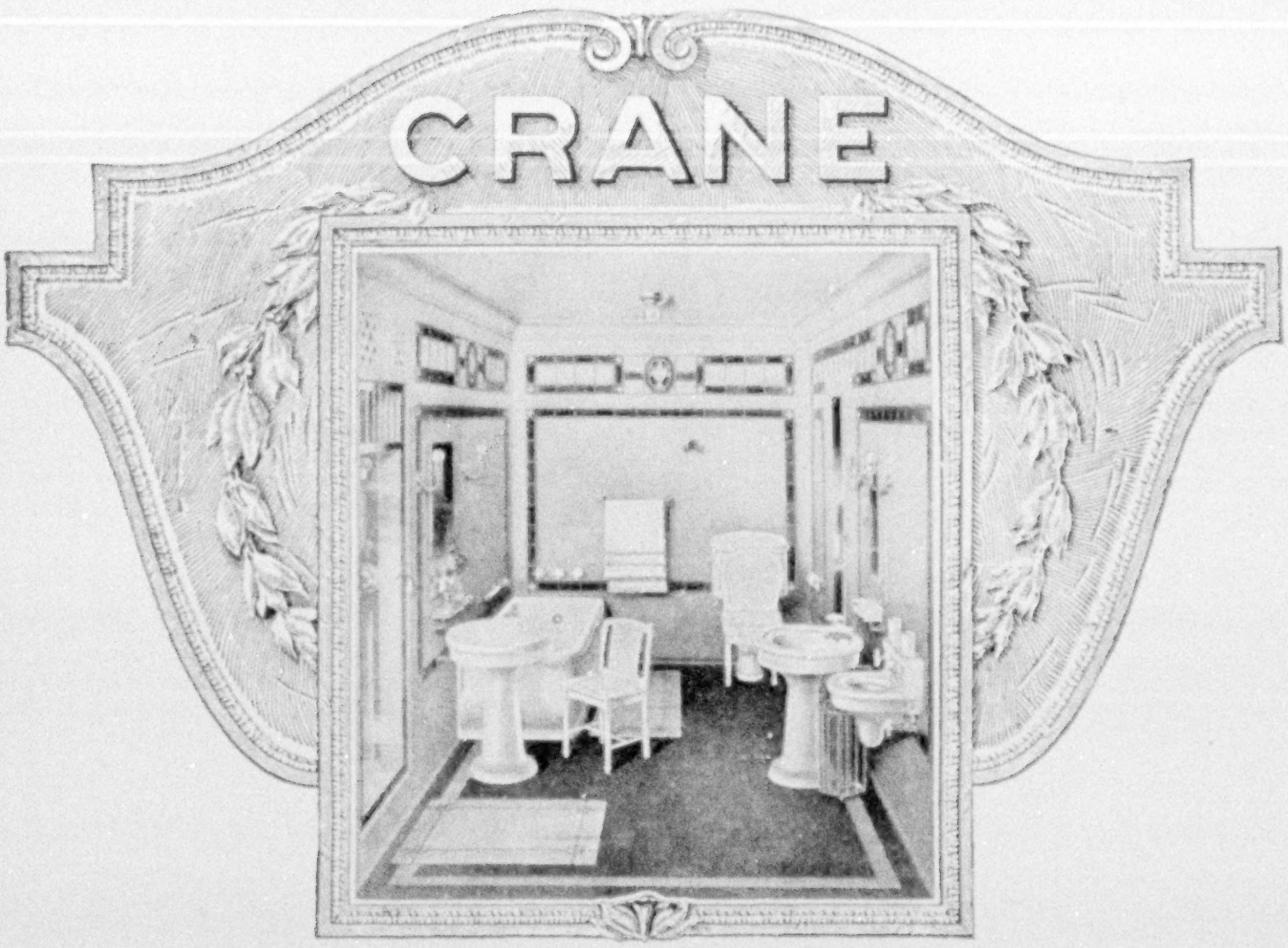
Your advantage in dealing with a Company whose representatives talk with an average of 3,000 banks a day.

Why these sales representatives are especially qualified to helpfully discuss your individual investment needs.

For a copy of this book, address our New York office, asking for AN 139.

BONDS
PREFERRED STOCKS
ACCEPTANCES

THE NATIONAL CITY COMPANY
NATIONAL CITY BANK BUILDING
NEW YORK

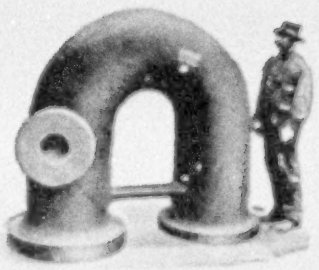


Safeguard the Investment

Every installation of a heating or plumbing system represents an investment to be safeguarded for the longest life and serviceability. For this reason it is to the advantage of owners and architects to make their complete selections from the Crane Line.

They can do this consistently because Crane Service supplies, through the trade, all of the heating and plumbing fixtures and incidental equipment needed for the small home or the great public institution, on the same quality basis.

The accompanying illustration of a huge special cast steel return bend is indicative of Crane ability to meet unusual requirements in the industrial markets.



We are manufacturers of about 20,000 articles, including valves, pipe fittings and steam specialties, made of brass, iron, ferrosteel, cast steel and forged steel, in all sizes, for all pressures and all purposes and are distributors of pipe, heating and plumbing materials.

BOSTON
SPRINGFIELD
BRIDGEPORT
NEW YORK
BROOKLYN
PHILADELPHIA
NEWARK
CAMDEN
BALTIMORE
WASHINGTON
ALBANY
SYRACUSE
BUFFALO
ROCHESTER
SAVANNAH
ATLANTA
KNOXVILLE
BIRMINGHAM
MEMPHIS
LITTLE ROCK
MUSKOGEE
TULSA
OKLAHOMA CITY
WICHITA
ST. LOUIS
KANSAS CITY
TERRE HAUTE
CINCINNATI

THERE IS A NEARBY CRANE BRANCH TO GIVE YOU CRANE SERVICE

CRANE CO.

836 S. MICHIGAN AVE. CHICAGO

VALVES - PIPE FITTINGS - SANITARY FIXTURES

CRANE EXHIBIT ROOMS

23 WEST 44TH ST. AND 22 WEST 45TH ST., NEW YORK CITY

TO WHICH THE PUBLIC IS CORDIALLY INVITED

BRANCHES: FIFTY-SEVEN LEADING CITIES · WORKS: CHICAGO, BRIDGEPORT

INDIANAPOLIS
DETROIT
CHICAGO
ROCKFORD
OSHKOSH
GRAND RAPIDS
DAVENPORT
DES MOINES
OMAHA
SIOUX CITY
ST. PAUL
MINNEAPOLIS
DULUTH
FARGO
ABERDEEN
GREAT FALLS
BILLINGS
SPOKANE
SEATTLE
TACOMA
PORTLAND
POCATELLO
SALT LAKE CITY
OGDEN
SACRAMENTO
OAKLAND
SAN FRANCISCO
WATERTOWN
LOS ANGELES

1855 1920

You needn't buy a new Kodak every time the film is all used

NEITHER do you have to buy a complete "Handy Grip" when the soap is all used. Unscrew the last of the stick, screw in a Colgate "Refill" stick and start fresh. And as an added touch of thrift—unscrew the last bit and stick it on the "Refill"—no waste whatever.

Lather with Colgate's and shave with comfort—no need of mussy rubbing in with the fingers. A quick, plentiful, softening lather that makes you wish you had another face to shave.

The Shaving Stick is the economical way to make a satisfactory lather. We can give you this impartial advice because we make Shaving Sticks, Powder, and Cream. Send 4c. for trial size of any one of these.

COLGATE & CO.

Dept. 66 199 Fulton Street New York

COLGATE'S

"HANDY GRIP"
PATENTED 1917

The Refill Shaving Stick

"Mention The Geographic—It identifies you"

Studebaker

SERIES 20 BIG-SIX

THE greatest touring car on the market—for quick getaway, pep, style, gasoline mileage, tire mileage, cost of upkeep and economical motoring satisfaction—everything one wants in a car.

60-H. P. detachable-head motor; 126-inch wheelbase, insuring ample room for seven adults. All Studebaker Cars are equipped with Cord Tires—another Studebaker precedent

Ask the Studebaker Dealer what Gasoline and Tire Mileage BIG-SIX owners are getting

"This is a Studebaker Year"

LIGHT-SIX

Touring	$1485
Landau-Roadster	1850
Sedan	2450

F. O. B. South Bend

SPECIAL-SIX

Touring	$1875
2-Passenger Roadster	1875
4-Passenger Roadster	1875
Coupe	2850
Sedan	2950

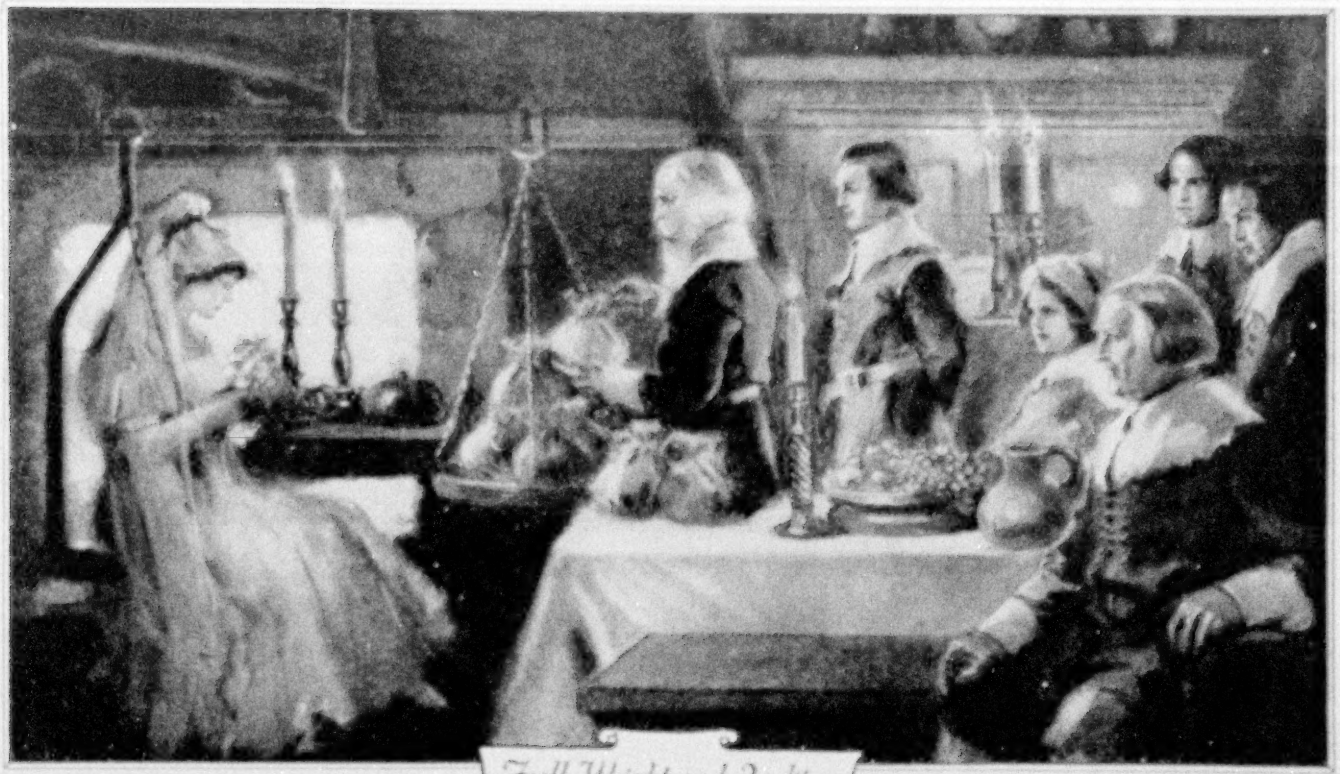
F. O. B. Detroit

BIG-SIX

Touring	$2350

F. O. B. Detroit

"Mention The Geographic—It identifies you"



Full Weight and Quality
The New England Standard

WHEN John Hull, the mint master of the Massachusetts Bay Colony, gave his daughter her weight in pine tree shillings as a dowry, he knew that every coin was full weight—and of exact fineness.

These silver pine tree shillings—the first coins minted in any of the colonies—well typify the painstaking care and sterling honesty of Puritan New England. And today this same quality is evident in New England manufactures—in a thousand and one products made better in New England than elsewhere, and at less cost.

The Old Colony Trust Company, by close association with New England's greatest industrial projects and developments, by familiarity with New England conditions and resources, is in an unusually favorable position to furnish reliable information and to execute financial commissions promptly and economically. We invite correspondence.

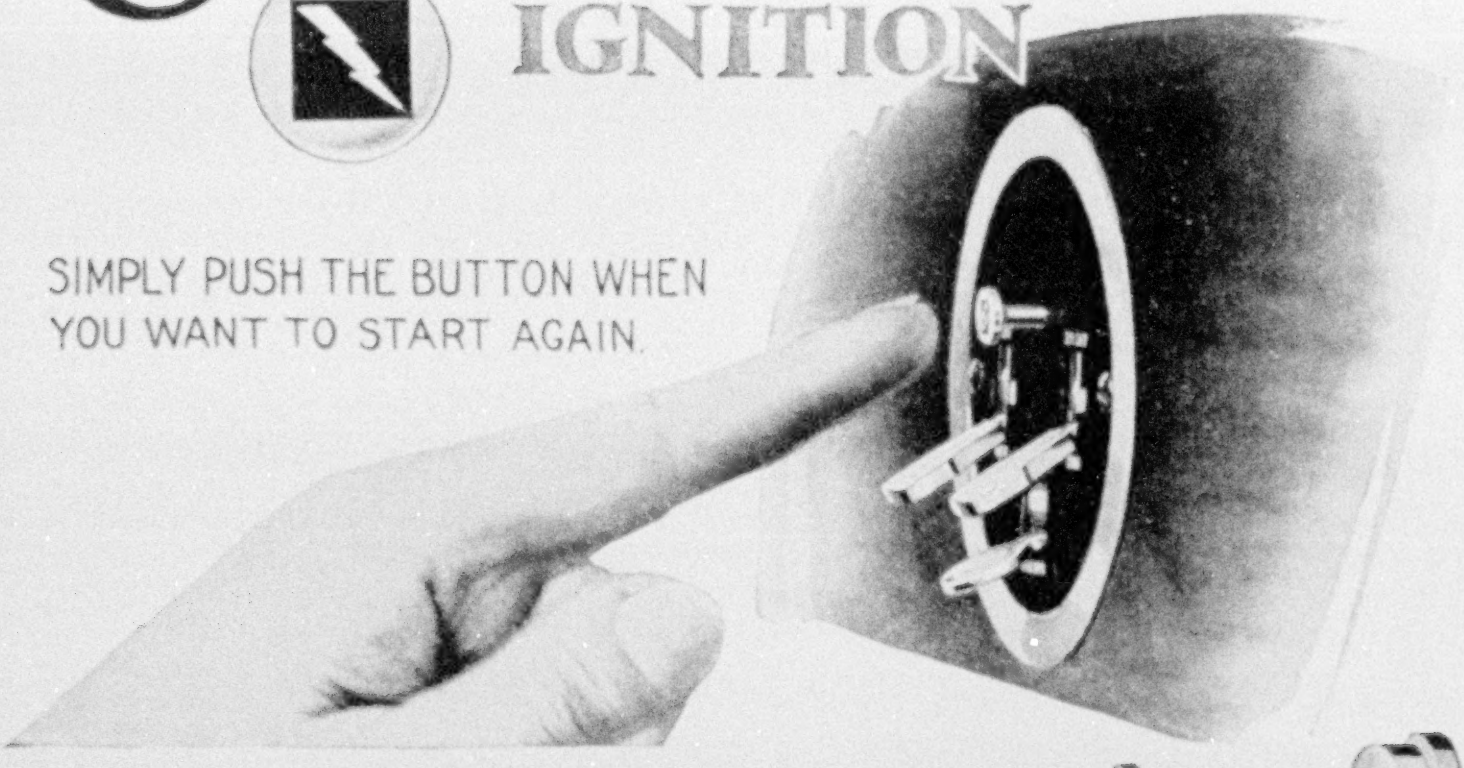
Come to New England. Enjoy the delights of shore and mountain. Familiarize yourself with her enormous industrial development. Visualize her tremendous growth as a market for goods and as a field for intensive industrial and commercial extension.

We shall be glad to send you our illustrated booklet, "*New England—Old and New*"—issued in commemoration of the three hundredth anniversary of the First Pilgrim Landing. Please address Department D.

OLD COLONY TRUST COMPANY
BOSTON

"Mention The Geographic—It identifies you"

CONNECTICUT IGNITION



How the Automatic Switch Insures Your Ignition

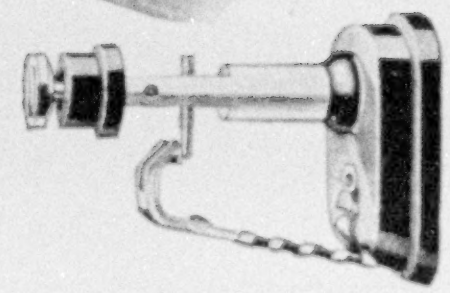
You forget to turn off your ignition often enough to create a real danger to the system; but forgetting makes no difference to the Connecticut system. When the motor stops, the continued flow of the current heats the thermostatic arm of the Connecticut Automatic Switch, causing it to expand, throwing off the plunger and breaking the circuit.

This thermostatic arm is composed of bronze welded to steel. The bronze expands more rapidly under heat than the steel, and this uneven expansion *automatically* snaps off the plunger, stopping the flow of current immediately.

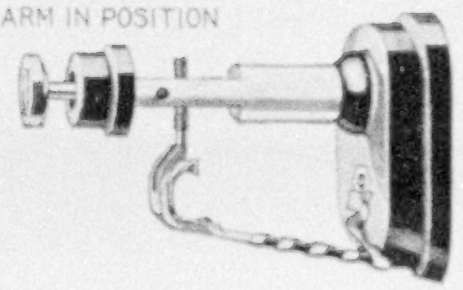
It is a simple mechanism, infallible in operation, and requires neither thought nor attention—except to push the plunger back when you want to start again.

The automatic switch thus permanently protects both coil and battery. Therefore the Connecticut system, free to deliver full current, furnishes a hot, fat, eager spark at all motor speeds.

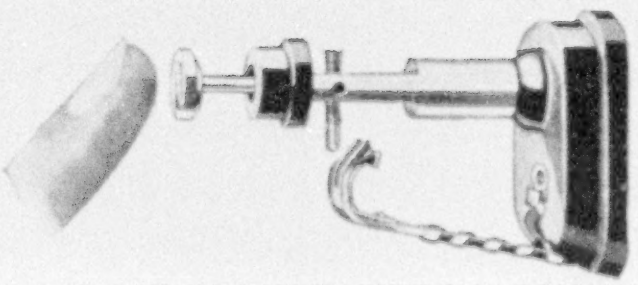
It should be on the next car you buy.



MOTOR RUNNING, CURRENT FLOWING, THERMOSTATIC ARM IN POSITION



MOTOR STOPPED, EXPANSION OCCURRING IN THERMOSTATIC ARM, WHICH IS JUST ABOUT TO RELEASE PLUNGER



PLUNGER OFF, CURRENT STOPPED - PUSH IT BACK WHEN YOU WANT TO START AGAIN

CONNECTICUT TELEPHONE & ELECTRIC COMPANY
Meriden — Connecticut

Why Teeth Glisten

Millions of them—a new method

All statements approved by high dental authorities

You see glistening teeth now wherever you look, for millions clean teeth in a new way. We offer you here a 10-day test, to show the results on your own teeth.

The fight on film

Dental science has found a way to combat film on teeth—the film that dims teeth and destroys them.

Film is that viscous coat you feel. It clings to teeth, enters crevices and stays. The ordinary tooth paste does not dissolve it, so brushing has left much of it intact. And very few people have escaped its damage.

It is the film-coat that discolors, not the teeth. Film is the basis of tartar. It holds food substance, which ferments and forms acid. It holds the acid in contact with the teeth to cause decay.

Millions of germs breed in it. They, with tartar, are the chief cause of pyorrhea, which attacks 95 in 100.

Now, after years of research, a way has been found to combat it. Able authorities have amply proved its efficiency. Leading dentists everywhere now urge its daily use. And millions of people now employ it, largely by dental advice.

The method is embodied in a dentifrice called Pepsodent. Two other new factors are combined with it. And this tooth paste is inaugurating a new dental era.

Free to all who ask

A 10-day test of Pepsodent is sent to all who ask. Also a book to explain the results. The method quickly proves itself.

Pepsodent is based on pepsin, the digestant of albumin. The film is albuminous matter. The object of Pepsodent is to dissolve it, then to day by day combat it.

Pepsin long seemed impossible. It must be activated, and the usual agent is an acid harmful to the teeth. But science has found a harmless activating method, so pepsin can be every day applied.

Send the coupon for a 10-Day Tube. Note how clean the teeth feel after using. Mark the absence of the viscous film. See how teeth whiten as the film-coat disappears.

Do this for your own sake and your family's sake. Nearly everybody suffers from this film. Cut out the coupon so you won't forget.

Pepsodent PAT. OFF. REG. U. S.

The New-Day Dentifrice

A scientific film combatant which, after 5 years' tests, is now advised by leading dentists everywhere.

Druggists supply the large tubes.

10-Day tube free

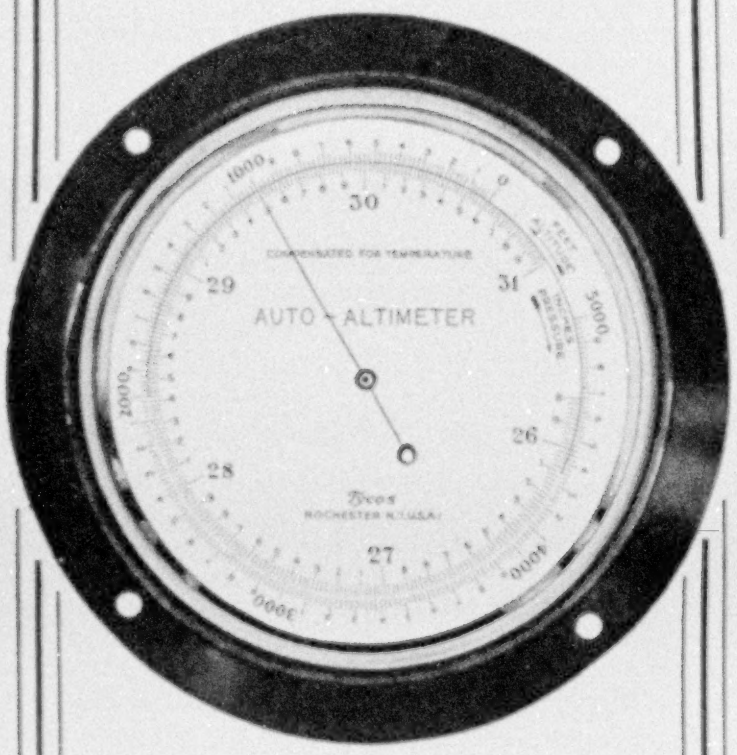
THE PEPSODENT COMPANY,
Dept. 653, 1104 S. Wabash Ave., Chicago, Ill.:
Mail 10-Day Tube of Pepsodent to

Only one tube to a family

If Motoring is Your Hobby

You will find unusual satisfaction in having the instrument board equipped with a

Tycos
Auto-Altimeter



It dresses the car, gives elevations above sea-level, predicts weather conditions, combines utility and the uncommon in car appointments.

Not affected by the vibration of the car. Has aluminum case finished in permanent black. Front edge is silver plated. Glass of the best bevel used. The silvered dial is finely divided.

Reads easily after a little experience. Made in three different styled dials for altitudes as follows: Reading to 5,000 feet, $35; reading to 10,000 feet, $36.50; reading to 16,000 feet, $39.

Inquire at leading motor supply shops, optical stores, etc. If dealer in your vicinity does not have them in stock remit price to us and we will send direct. (Mention dealer's name.)

Taylor Instrument Companies
ROCHESTER, N. Y.

There's a *Tycos* and *Taylor* Instrument for Every Purpose

No. 2—A. C.

Tycos

—action
—with the New Stromberg Carburetor is as quick as thought. A rush of power instantly follows the demand on your engine. Efficiency is always on its finest edge. On the traffic-choked boulevard or out in the open stretches, *you* are *master*. You can slow down to a snail's pace—surge ahead at express speed—stop—start, at will—your machine is under *control*.
In addition to this—you get *most* miles per gallon. These are *facts*—proved absolutely by service and fully explained in literature, which will be sent you upon request. Write for it. State name, year and model of your car.
Stromberg Motor Devices Co.
64 East 25th Street
Chicago Dept. 819 Illinois
New STROMBERG CARBURETOR Does it!

Every Whitman Saddle Bears the Silver Shield Trade-Mark

The Saddle of 5000 master horsemen

This is the saddle of the mounted officers of the U. S. Army—the Goodrick-Saumur—designed and selected after long trial by a board of cavalry experts.

This also was the saddle used in France by our most distinguished officers. We alone can supply it to you now for civilian use.

Each is the hand-work of America's most famous saddlers.

View the Goodrick-Saumur Saddle at your local shop or at our two equestrian show-rooms:

89 Chambers St., New York City
1329 S. Michigan Ave., Chicago

The Perkins-Campbell Company
Cincinnati

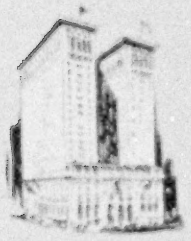
De Luxe book of saddles loaned on request

The World Famous Hotels of Pershing Square

NEW YORK

Under the direction of JOHN Mc E. BOWMAN, Pres.

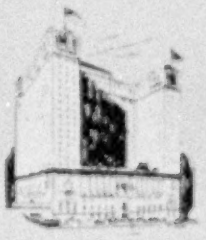
All the amazing interests and luxuries of 20th Century hotel life center in Pershing Square, New York. Each hotel an Aladdin's palace of comfort, convenience and pleasure—assured by the combined efforts of a group of the best hotel managers in the world.



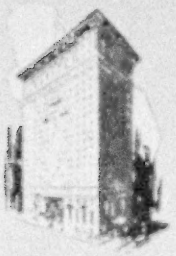
The Biltmore

Under MR. BOWMAN'S personal direction. Adjoins the Grand Central Terminal. The center of international social life in the metropolis, typifying the best and brightest in American hotels.

Hotel Commodore



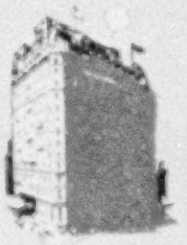
GEO. W. SWEENEY, Vice-Pres. and Managing Director. "Get Off the Train and Turn to the Left." The great new hotel which met with instant success.



The Belmont

JAMES WOODS, Vice-Pres. and Managing Director. Opposite Grand Central Terminal. Quiet, conservative luxury and every modern comfort.

Hotel Manhattan



PAUL B. BODEN, Vice-Pres. and Managing Director. A step from the Grand Central. Has the hospitable atmosphere of a great, luxurious club.

Plan of proposed new building

The Murray Hill

JAMES WOODS, Vice-Pres. and Managing Director. A short block from the Station. Famous for its quiet, homelike atmosphere for two generations. The present structure is to be replaced in the near future by a great, new Murray Hill.

ALSO The Ansonia

BROADWAY AT 73RD STREET

EDW. M. TIERNEY, Vice-Pres. and Managing Director. In the Riverside Residential Section. Offers the service and appointments of the Pershing Square Group.

PERSHING SQUARE HOTELS, NEW YORK

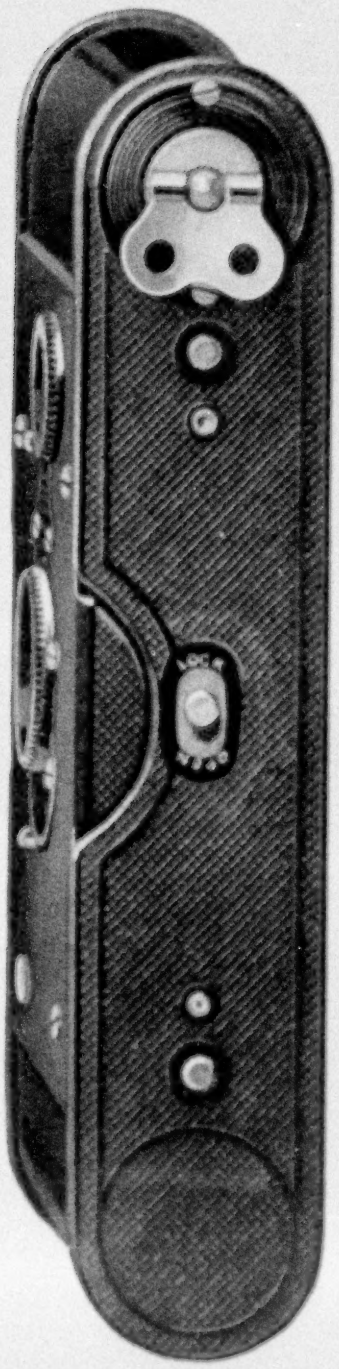
Like
Floral Sweets
THE sweet in the heart of the fragrant flower has an equally charming rival in the light, cool, creamy layer found between the ambrosial petal-wafers of NABISCO, the dessert confection that raises the simplest refreshment to a feast of alluring delight.
Sold in the famous
In-er-seal Trade Mark package
NATIONAL BISCUIT COMPANY
NABISCO
NATIONAL BISCUIT COMPANY
NEW YORK, N.Y.
IN ER SEAL
TRADE MARK

ANOTHER flower-like wafer is RAMONA—having at its center a wealth of creamy cocoanut, enhanced by delicate strips, chocolate-flavored.

Like NABISCO, RAMONA *is sold in the famous In-er-seal Trade Mark package.*

MADE WITH A VEST POCKET KODAK

You don't carry it;
you wear it—
like a watch.



ACTUAL SIZE

The Vest Pocket KODAK

With a "Vest Pocket" you're always ready for the unexpected that is sure to happen.

Your larger camera you carry when you *plan* to take pictures. The Vest Pocket Kodak you have constantly with you to capture the charms of the unusual. It is small in size but lacks nothing in quality.

The price is $9.49. Film for 8 exposures is 25 cents. Both prices include the war tax.

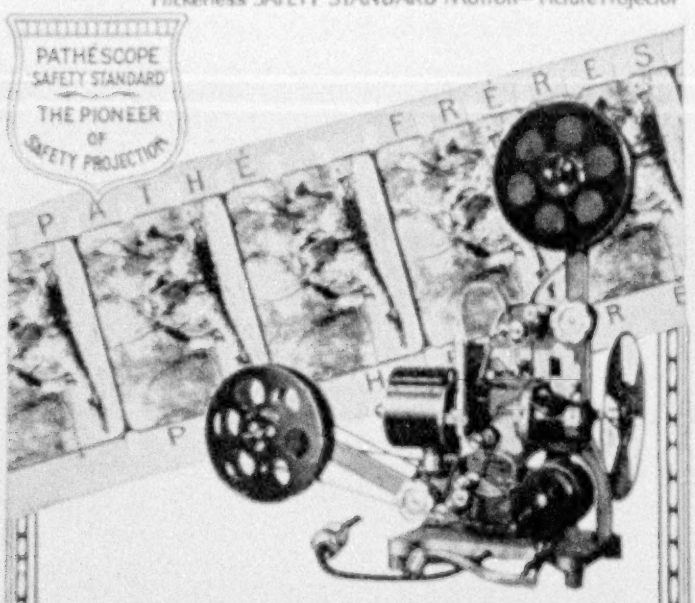
All Dealers'.

Eastman Kodak Company
Rochester, N. Y., *The Kodak City*

THE NEW PREMIER

Pathéscope

Flickerless SAFETY STANDARD Motion Picture Projector



The ideal entertainer
and instructor for Homes, Clubs, Schools, and Churches

For the absorbing fun of creating original "movies"; for treating your friends to the interests of your travels; for enjoying at home, thru the medium of Pathéscope Film Exchanges, films of Mary Pickford, Charlie Chaplin, Wm. S. Hart, Douglas Fairbanks, and other famous stars—these are suggestions of the pleasures you can impart through the Pathéscope Projector and Pathéscope Camera.

Over two hundred thousand Public School Children see Pathéscope Educational Pictures every week through the equipment of only one hundred of the New York Public Schools.

All schools need and should have them.

And a sales multiplier for business

The Pathéscope gets sales-deciding ideas across to pre-occupied men as nothing else can. An already long list of firms, including the Atlas Powder Company, Baldwin Locomotive Works, National Cash Register Company, International Correspondence School, etc., have proven that prospects are glad to learn, through the Pathéscope, the things they ought to know about products and methods.

The Pathéscope Weighs only 23 pounds.

Can be carried in suitcase. Operates on any electric-light circuit.

SAFE—therefore machine and film are approved by Underwriters' Laboratories, Inc.

Write for full descriptive matter, list of reels, etc.

The Pathéscope Co. of America
Incorporated

WILLARD B. COOK, President
Dept. K
AEOLIAN HALL
NEW YORK CITY

Agencies in Principal Cities

23 YEARS OF CINEMA SUPREMACY KOK

HARRISON MEMORIALS

From time immemorial monuments have been erected as the truest expression of regard.

A Harrison Memorial of enduring Barre Granite reflects taste and individuality.

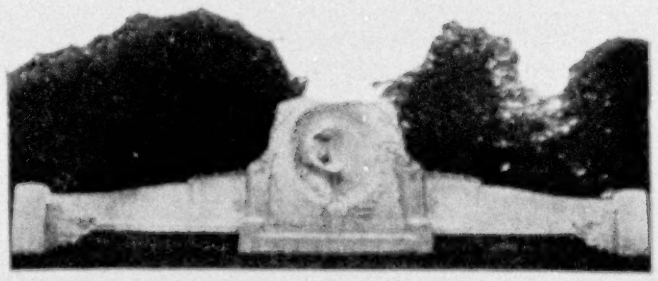
Write for Booklet 3

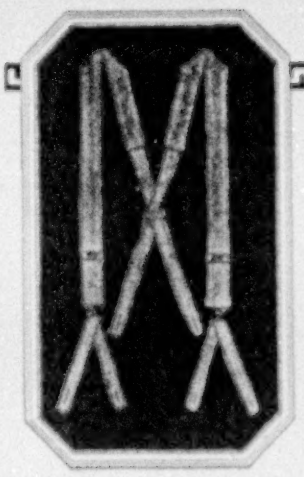
HARRISON GRANITE CO.

200 Fifth Ave. New York

Offices in principal cities Works: Barre, Vt.

Member of Memorial Crafts Institute





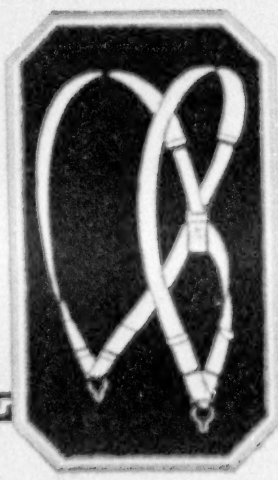
KADY Suspenders

have for years been preferred by the well-dressed man because of their style, quality, and *comfort*. Kady's famous Double Crown Roller adjusts the suspenders to every motion of the body, prevents pulling or binding, and assures easy comfort and *right*-hanging trousers at all times. Fresh, live elastic. Wide variety of webbings. All sizes. Look for "Kady" on the buckle.

At Leading Haberdasheries

KADY Concealed
(Patented)

are worn under the shirt, with or without a belt. With Kady Concealed supporting trousers you can wear your belt as loose as you please and avoid dangerous compression of abdomen. Easily fastened to side buttons on inside of trousers waistband—no reaching up the back for a suspender end. Double Crown Roller. White webbing. For business or evening wear. Ask to see them.



At Leading Haberdasheries

THE OHIO SUSPENDER CO.
Mansfield, Ohio

Discrimination

—exists among purchasers of periodicals

You are reading the

National Geographic Magazine

—probably because it appeals
to you as having much merit.

Should the same line of thought carry you into the value of articles of food, you should exercise the same good reasoning.

For instance, there are many brands of corn flakes on the market. What corn flakes do you eat? Are you striving for the best in food as well as in literature?

An accurate estimate proves that among corn flakes, more of one brand are sold than any other—and those flakes are

POST TOASTIES

Toasties lead because the quality of the product is better —and consequently, more and more people desire them.

If you are not eating Post Toasties, why not order a package from your grocer.

Comparison proves the superiority of Post Toasties.

Sold by Grocers Everywhere!

Made by Postum Cereal Co.
Battle Creek, Michigan

"Mention The Geographic—It identifies you"

In other words

Camels supply everything you hoped for in cigarettes!

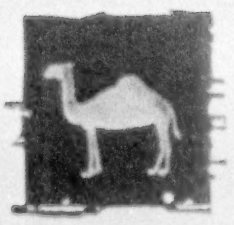
Camel CIGARETTES

YOUR taste will prove that in quality, flavor, fragrance and mellowness Camels give you a *real* idea of how delightful a cigarette can be! You will greatly prefer Camels expert blend of choice Turkish and choice Domestic tobaccos to either kind of tobacco smoked straight.

Camels hand out satisfaction you never before got from a cigarette. They have a wonderful smooth satisfying mildness yet that desirable body is all there! And, Camels do not tire your taste!

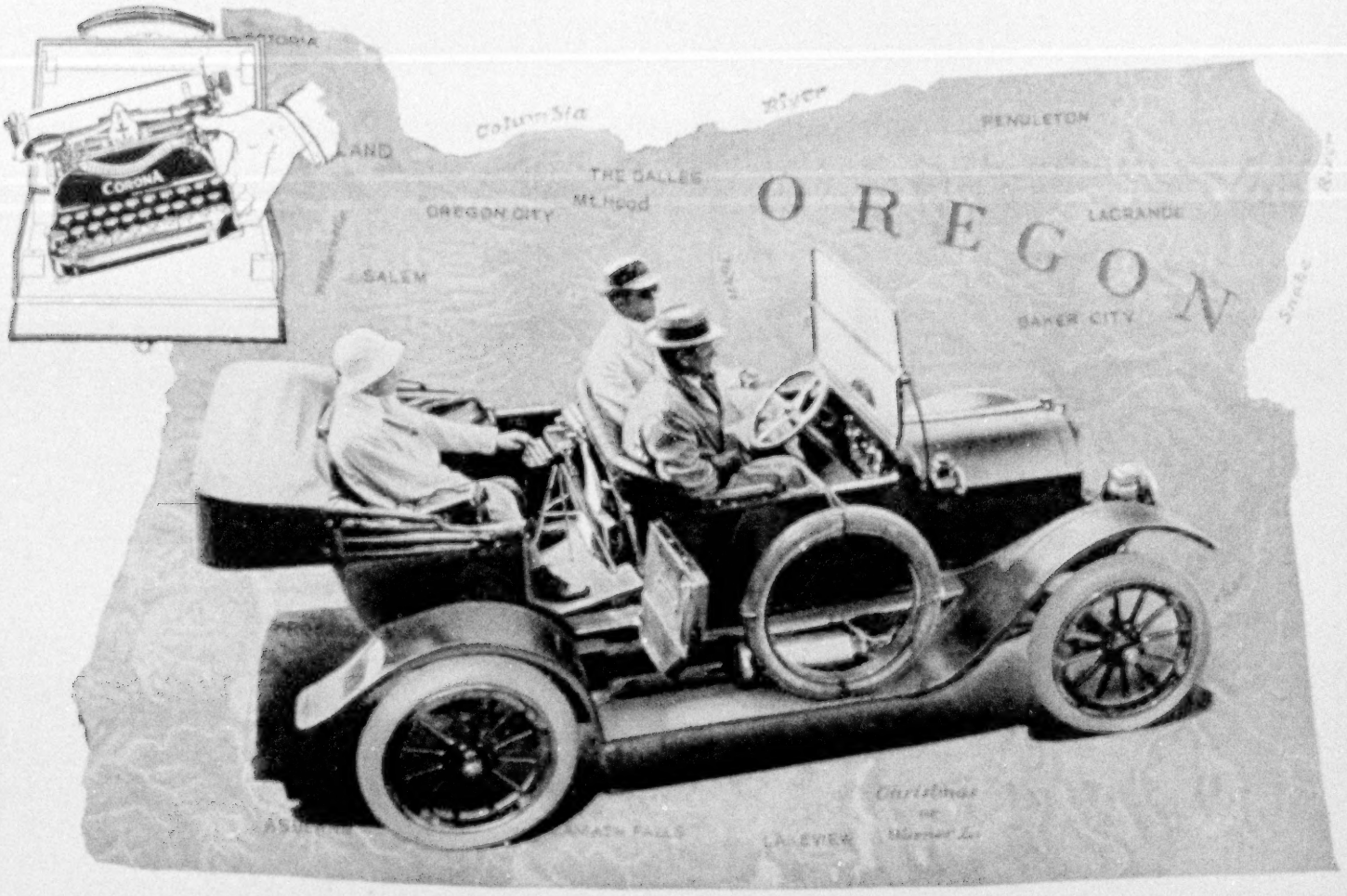
Another feature about Camels—they leave no unpleasant cigaretty aftertaste nor unpleasant cigaretty odor.

Camels superiority is best proved by comparing them with any cigarette in the world at any price.



Camels are sold everywhere in scientifically sealed packages of 20 cigarettes for 20 cents; or ten packages (200 cigarettes) in a glassine-paper-covered carton. We strongly recommend this carton for the home or office supply or when you travel.

R. J. REYNOLDS TOBACCO CO., Winston-Salem, N.C.



Map Copyrighted by
Rand McNally Co., N. Y.

"—and they Coronatyped all over Oregon!"

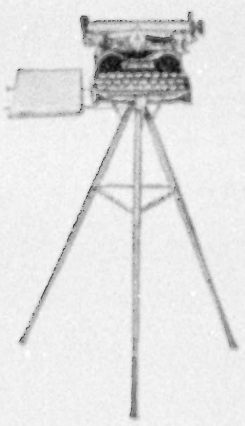
IN 1917 Corona recorded a 1400 mile motor journey of E. T. Buzzelle, of Salem, Oregon, whose job was to make a property inventory for the Washington-Oregon Telephone Company. The trip was accomplished through all kinds of weather and over all sorts of roads, and Mr. Buzzelle kept on typing, often when the car made 30 miles an hour. Despite a coating of sand and dust, Corona finished in excellent condition.

Your Corona may never be subjected to so severe a test; but it is interesting to know that its lightness and compactness have been achieved while still retaining full measure of staunchness and "write ability."

Price $50 with carrying case.

Consult your telephone book for name of nearest Corona dealer.

Built by
CORONA TYPEWRITER COMPANY, Inc.
GROTON, N. Y.



A Telescoping Tripod Stand

Made of seamless brass tubing, finely nickeled. Provided with copy-holder. Adjustable to three different heights, 10½ inches long when folded. Convenient anywhere, especially when out-doors or traveling. Price, $6.00.

CORONA

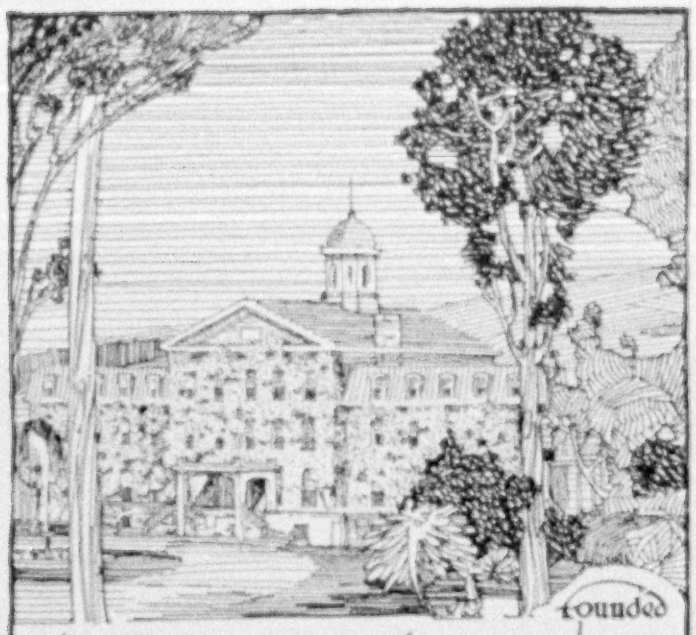
The Personal Writing Machine

TRADE MARK

Fold it up—Take it with you—Typewrite anywhere

"Mention The Geographic—It identifies you"

XUM



Founded 1867

Highland Hall

SCHOOL for GIRLS

In old residential Hollidaysburg located in the most beautiful and healthful section of the Allegheny Mountains, six miles by electric and steam trains from Altoona on Main Line of Penna-Railroad

College preparatory, General and Post-Graduate Courses.

Address Miss Ellen C. Keates, A.B., Principal. Hollidaysburg Pa.

TYROL WOOL
REG. U. S. PAT. OFF.

THE TRADE-MARK

Price, $34.75

which identifies the original and genuine all worsted knitted fabric from the ordinary knitted wool jersey.

Ladies', Misses', and Juniors' Tailored Suits and Coats

$34.75 to $39.75

All Colors
Several Models

Tyrol Wool has an established reputation and a known value.

Catalog and Samples on Request
Mail Orders Filled

MANN & DILKS
PHILADELPHIA, PA.

DUES

Annual membership in U. S., $3.00; annual membership abroad, $4.00; Canada, $3.50; life membership, $50. Please make remittances payable to National Geographic Society, and if at a distance remit by New York draft, postal or express order.

RECOMMENDATION FOR MEMBERSHIP

IN THE

NATIONAL GEOGRAPHIC SOCIETY

The Membership Fee Includes Subscription to the National Geographic Magazine

PLEASE DETACH AND FILL IN BLANK BELOW AND SEND TO THE SECRETARY

.....192

To the Secretary, National Geographic Society,
Sixteenth and M Streets Northwest, Washington, D. C.:

I nominate .....

Address .....

.....

for membership in the Society

.....

.....
Name and Address of Nominating Member

8-20

PAINTED FOR FATHER TIME BY HUGH RANKIN

THE world holds no other street quite like "the Street of the Great Clock" in Rouen, France.

Joan of Arc, burning at the stake, gazed down this historic street. Its great bell, Rouvel, then almost three centuries old, rang the curfew on that fateful night—and rings it to this day.

Father Time has touched the street but lightly. Much of its glorious architecture has vanished—but the massive clock with its six-foot dial is still official timepiece of this ancient town.

Jehan de Fêlanis little dreamed, when he finished it in 1389, that here was the forerunner of *portable* timepieces so tiny, so amazingly accurate, that millions would be wearing them today—

Material, construction, adjustments and service fully covered by Elgin Guarantee . . . .

Corsican
$150

Elgin Watches

"Mention The Geographic—It identifies you"

Delicious Iced Coffee Ready in an Instant

Just follow these simple directions: One teaspoonful, more or less, of G. Washington's Coffee, according to taste, in *cold* water. Stir until dissolved; add cracked ice, sugar and cream.

Special Trial Size 10c.
Recipe Booklet Free

G. Washington's COFFEE

Originated by Mr. Washington in 1909
G. Washington Sales Co., Inc., 522 Fifth Ave., New York City

Haroun al Raschid

ruled North Africa in the year 800. In *Algeria* and *Tunisia* you still find the atmosphere of *Bagdad* and the *Arabian Nights*, with Roman ruins for good measure and French hotels for comfort. Tours of two and three months to

Arabian Nights Africa

September 11, October 9, and later.

Round the World

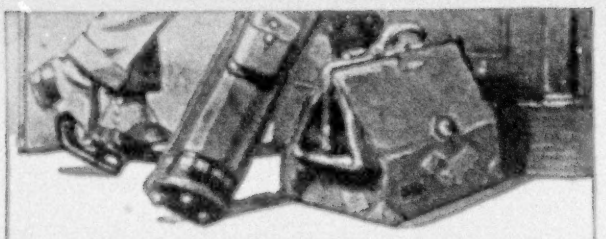
to countries stranger than those of *Scheherazade*. Carefully planned tours of five to nine months, starting this autumn.

Tours to the *Pacific Northwest*.
Other tours to *Europe—South America—Japan-China*

Send for booklet desired

RAYMOND & WHITCOMB CO.
Beacon and Park Streets, Boston 4—or New York, Philadelphia, Chicago, San Francisco, Los Angeles.

RAYMOND-WHITCOMB TOURS AND CRUISES



When you travel

your baggage is exposed to innumerable hazards.

You insure these same effects while in your home where they are under your watchful care. Why not when you travel and they are subject to risks beyond your control?

Count up the value of your belongings. Figure it out. Can you afford not to

insure your baggage?

Think of the chances of loss from fire, theft, pilferage, etc., while it is in transit, in hotels, club-houses, and everywhere outside of your home! A NORTH AMERICA policy gives liberal protection and

costs but a few dollars a year

Write today for specimen policy or consult any North America agent.

Special policy covering Salesmen's Samples.

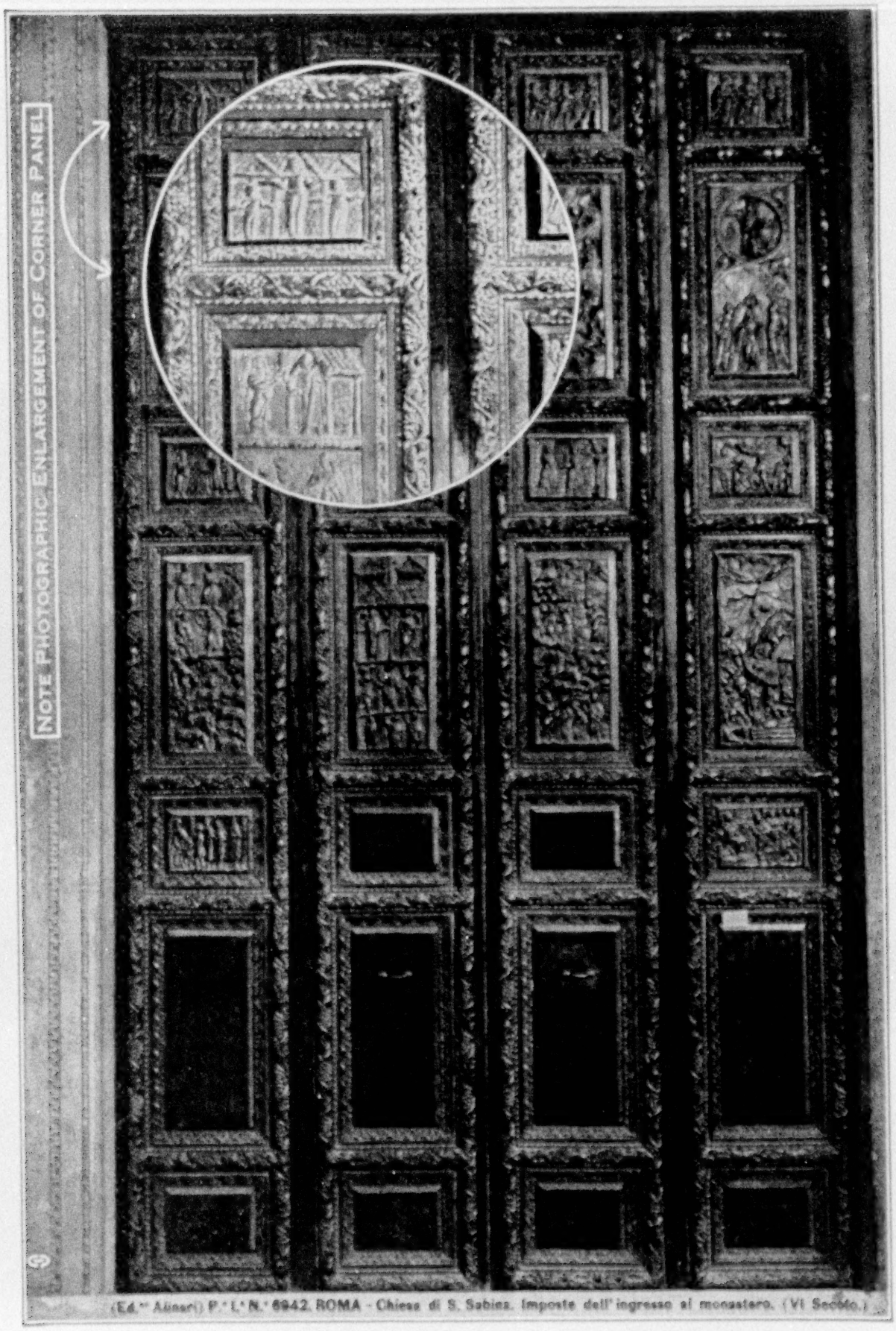
Insurance Company of North America

Dept. B, Philadelphia

Any agent or broker can get you a North America policy

"THE OLDEST DOOR IN THE WORLD."

It may be seen in the Church of Santa Sabina, on the Aventine Hill in Rome. "This door is of Cypress and is adorned with carvings, mostly of the 5th Century. The upper carving at the left is said to be the oldest representation of the crucifixion." Another archaeological authority (in Princeton, New Jersey) writes, "Opinions vary as to the dates of these doors, but the weight of opinion puts them as early as the 5th or 6th Century, A. D." (DOES CYPRESS, "The Wood Eternal," LAST?)


NOTE PHOTOGRAPHIC ENLARGEMENT OF CORNER PANEL
(Ed.ne Alinari) P. L. N. 6942. ROMA - Chiesa di S. Sabina. Imposte dell'ingresso al monastero. (VI Secolo.)

BUY YOUR CYPRESS BY THE CYPRESS ARROW

TRADE MARK REG. U.S. PAT. OFFICE

ALL LUMBER FOR USES WHICH INVITE DECAY SHOULD BE "ALL-HEART" WOOD. (SPECIFY THIS.)

AS A GUARANTY OF "TIDE-WATER" CYPRESS, THE TRUE "WOOD ETERNAL," INSIST THAT THIS CYPRESS ARROW MUST BE ON THE END OF EVERY BOARD OR TIMBER, AND ON EVERY BUNDLE OF SHINGLES AND SMALL ITEMS.

If a Cypress door continues in daily use for over 1400 years, and you build your new home of Cypress, all or in part, how much will you and your posterity save in repair bills if put out at compound interest? The same logic applies to present repairs or additions on structures built by people who did not learn about "The Wood Eternal" soon enough. Mansion, cottage, back fence or pergola—it's all the same.

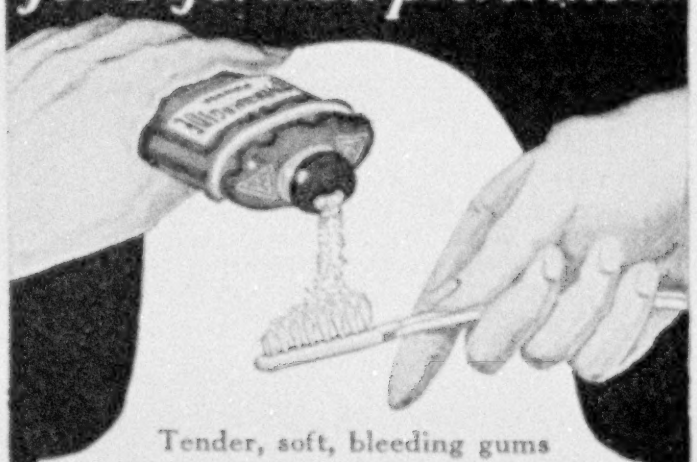
The photograph above (much larger) on India Tint Paper, is the "art supplement" to Volume 38 of the internationally famous Cypress Pocket Library. This vol. is about "home grown" furniture and contains full sized detail plans and complete specifications for seven different furniture designs. 52 pages. 12 illustrations. 2 supplements. It is yours on request, with our compliments. The sooner the better. (Also ask for Vol. 1.)

Southern Cypress Mfrs. Association, 1224 Hibernia Bank Building, New Orleans, La., or 1224 Heard National Bank Building, Jacksonville, Fla.

XUM

PYORRHOCIDE
POWDER
ANTISEPTIC

for Pyorrhea prevention

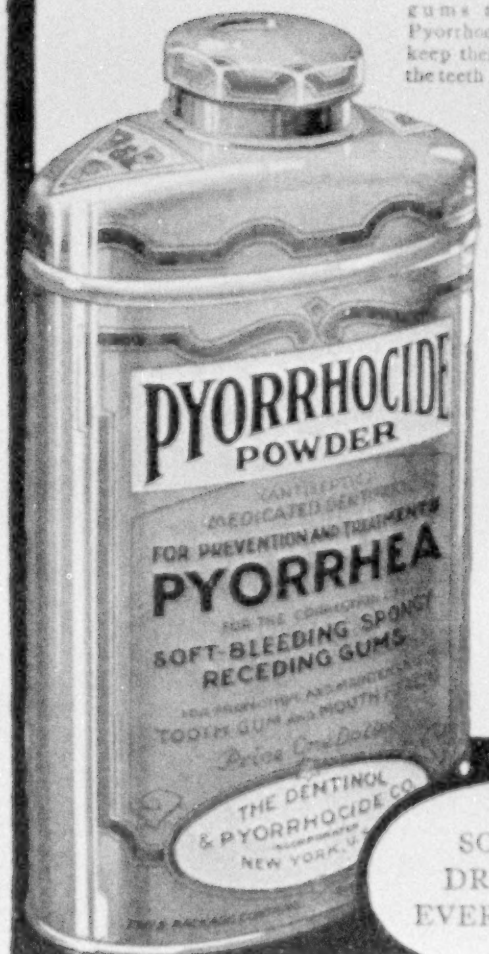


Tender, soft, bleeding gums

are the first symptoms of pyorrhea. If unchecked, pyorrhea causes loss of teeth and menaces health.

Pyorrhocide Powder was scientifically compounded for the specific purpose of restoring and maintaining gum health. It is the only dentifrice whose value in treating and preventing pyorrhea has been demonstrated in clinics devoted exclusively to pyorrhea research and oral prophylaxis. That is why it is so widely prescribed by the dental profession.

If your gums show pyorrheic symptoms, Pyorrhocide Powder will aid in restoring them to a healthy condition. If your gums are healthy, Pyorrhocide Powder will keep them so. It cleans the teeth most effectively; removes the mucoid deposits and daily accretions.



Pyorrhocide Powder is economical because a dollar package contains six months' supply. Sold by leading druggists and dental supply houses.

Free Sample

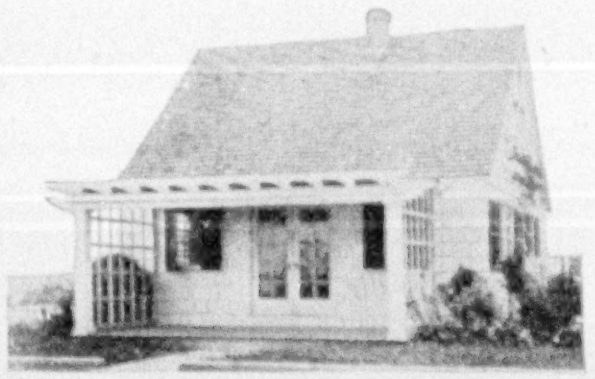
Write for free sample and our booklet on Prevention and Treatment of Pyorrhea.

The Dentinol & Pyorrhocide Co., Inc.,
Sole Distributors
1478 Broadway
New York

SOLD BY DRUGGISTS EVERYWHERE

Our research work and our clinical and laboratory facilities enable us to disseminate information that is authoritative on pyorrhea treatment and prevention.

L. V. Slaught
Pres



A Bungalow or a Country House

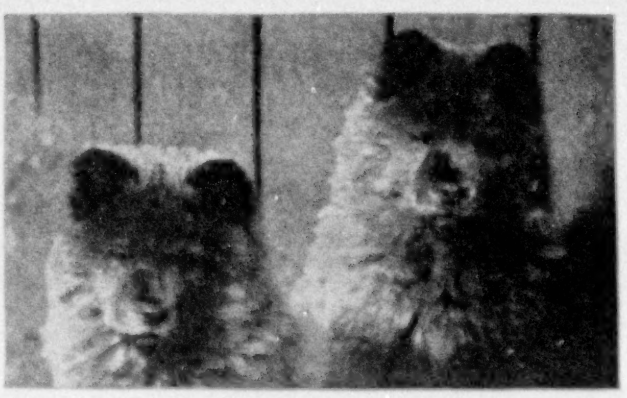
The many beautifully designed and substantial Bossert Houses offer you a wide range of choice for a home, whether you want a summer bungalow or a house for all-year use. And because of the great variety of types the chance of architectural duplication is minimized.

By our methods we save you 1/3 on building costs, and you know before you spend a dollar what 75% of the total cost of the house will be. This you could never know if you were to build on the site in the old hand-labor way because of constantly increasing labor and material costs, which are now 300% higher than a few years ago. The other 25% is for excavating, masonry, plumbing, wiring, and interior decorating, which can be done more economically locally.

Catalog showing full line of Bossert Houses mailed for 18c.

LOUIS BOSSERT & SONS, Inc.
1313 Grand Street Brooklyn, N. Y.

A BENCH SHOW IN ITSELF



The Book of Dogs

The character, heroism, and sagacity of mankind's best friend

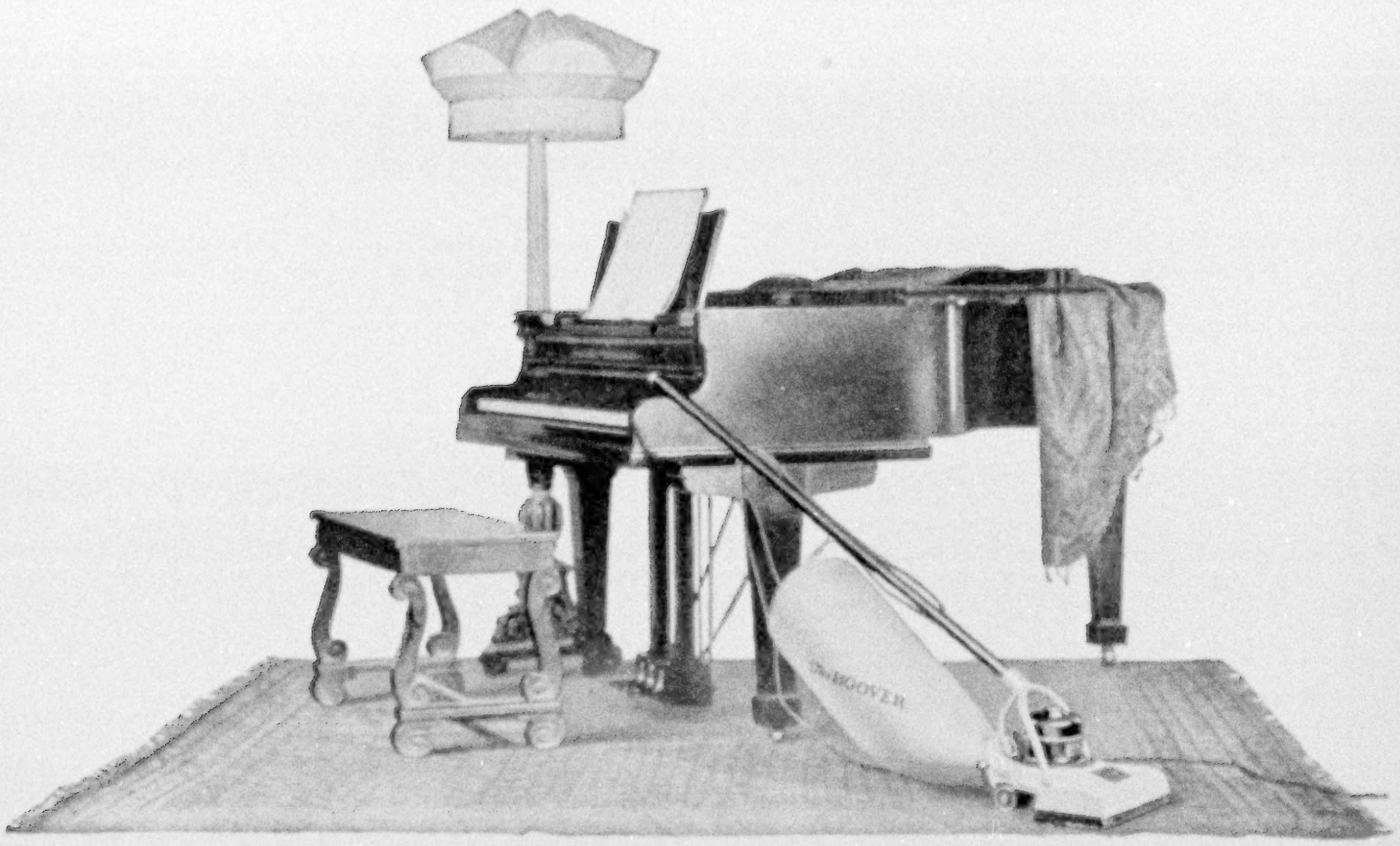
This book, with its 128 full-color dog portraits by Louis Agassiz Fuertes, its authoritative descriptions of breeds and canine character, is a guide to dog-fancier and a delight to all who love dogs.

Circular on Request

Stiff or Flexible Covers, $2.00, postpaid in U.S.A.

NATIONAL GEOGRAPHIC SOCIETY
WASHINGTON, D.C.

The Hoover lifts the rug from the floor, like this — flutters it upon a cushion of air, gently "beats" out its embedded grit, and so prolongs its life



The perennial beauty of a valuable rug is the reward of frequent and thorough cleaning. Such cleaning is easy to perform with The Hoover because it beats . . . as it sweeps, as it suction cleans. All injurious embedded grit is fluttered out by gentle beating. All stubborn litter is detached by swift sweeping. All loose dirt is withdrawn by strong suction. Only The Hoover combines these three essential operations. And it is the largest selling electric cleaner in the world.

The HOOVER

It Beats—as it Sweeps—as it Cleans

THE HOOVER SUCTION SWEEPER COMPANY
The oldest makers of electric cleaners
North Canton, Ohio Hamilton, Canada

GLIMPSES INTO THE SPIRIT OF AMERICA'S SECOND GREATEST INDUSTRY. (No. 1)

Similarity of Ideals Is What Makes a Nation

It was America that changed the definition of "nationality" from a similarity of race to a similarity of taste. Also it was America which first elevated the widespread sense of *patriotism* from a mere massing of individual ambitions into a solider fabric of *mutual aids* to *Community Needs.*

It is singular that the railroads, the postal service, the telegraph and telephone, the fire and water departments, meat packing, steel making, lumbering and various other universal needs have achieved their present degree of high relative efficiency apparently without much regard for whether they were so-called private or so-called public enterprises.

This is because one of the prime incentives has been a certain pride in *Public Service,* with personal pride in making a *first class job* of it. Disregarding all theories of social organization, it is certain that, in any case, *the same men* would have done the same jobs in the same faithful and proudly progressive way—because of their proven superior fitness for the vital and difficult work in hand.

So it seems to be more a matter of *efficient spirit* in *public service* than it is of just who or what is the immediate employer of the kind of special talent needed.

Next to food, *shelter* is the most important thing for mankind, and for this purpose the varied products of TREES have been his chief reliance ever since the increasing population caused a shortage of caves.

So the American *Lumber Industry* is, and always has been, practically second to agriculture as a facile, dependable and economical reliance for us all.

Of course, in most cases, the harder the wood the longer it lasts and the more serviceable it is. Therefore, it is that the notable variety of Hardwoods in our great deciduous forests, are so vital a fact of our national life and comfort.

The breadth of concept and purpose, in war and peace, of the many thousands of independent loggers, sawyers, executives and fine craftsmen engaged with our American Hardwoods is one of the most encouraging truths of American Industry—just as their product is one of the elemental daily and hourly needs of the life of every one of us.

YOU CANNOT EVEN SIT ON A CHAIR without realizing this. *(All chairs are of hardwood.) You cannot even reprove your young son for accidentally digging his restless heel against the INTERIOR TRIM of your home without realizing this—and without being glad that it is hardwood, and thus practically "mar-proof."*

The splendid co-operation in the American hardwood manufacturing industry, among all elements concerned, deserves not only mutual recognition among themselves but also a fuller knowledge by the consuming public—which means everybody. This it will be our purpose to help along by a few simple little stories of *facts* that are much *simpler,* and much *more important,* and *vastly more fascinating,* than they may have seemed.

WATCH THIS PUBLICATION FOR *GLIMPSE NO. 2*

American Hardwood Manufacturers' Association

MEMPHIS, TENNESSEE

American Oak	Cottonwood	Elm	Sycamore	Willow
Red Gum	Chestnut	Beech	Tupelo	Lynn
American Walnut	Hickory	Basswood	Cherry	Magnolia
Poplar	Ash	Maple	Persimmon	et al.

A Cenotaph Memorial in Rock of Ages Granite

WHEN you specify ROCK OF AGES GRANITE for a soldier's cenotaph, you are writing a message on the walls of the centuries.

A memorial in ROCK OF AGES GRANITE will forever reflect great credit upon the judgment of the erectors.

Illustrated booklet on request.

BOUTWELL, MILNE & VARNUM CO.
MONTPELIER, VERMONT
(Quarries at Barre)

© 1920, B., M. & V. Co.

Sani-Flush

Cleans Closet Bowls Without Scouring

It's So Easy to Keep the Closet Shining

Sani-Flush is made for just that one thing—to make it easy for you to keep your closet bowl shining white. No more dipping out of water, scrubbing nor scouring. Just follow the directions on the can and stains and deposits of every sort—in every cranny of the bowl and trap will disappear. Vigorous cleaner that it is, *Sani-Flush* cannot hurt the plumbing.

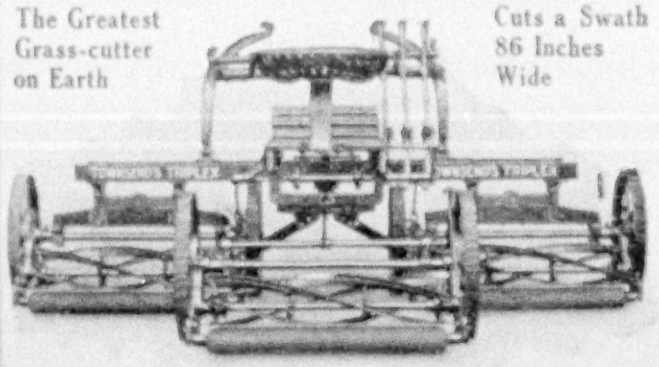
Sani-Flush is sold at grocery, drug, hardware, plumbing, and housefurnishing stores. If you cannot buy it locally, send us 25c in coin or stamps for a full-sized can postpaid. (Canadian price, 35c; foreign price, 50c.)

THE HYGIENIC PRODUCTS COMPANY
825 Walnut Ave., Canton, Ohio
Canadian Agents, Harold F. Ritchie & Co., Ltd., Toronto

TOWNSEND'S TRIPLEX

The Greatest Grass-cutter on Earth

Cuts a Swath 86 Inches Wide



Floats Over the Uneven Ground as a Ship Rides the Waves

One mower may be climbing a knoll, the second skimming a level, and the third paring a hollow. Drawn by one horse and operated by one man, the TRIPLEX will mow more lawn in a day than the best motor mower ever made; cut it better and at a fraction of the cost.

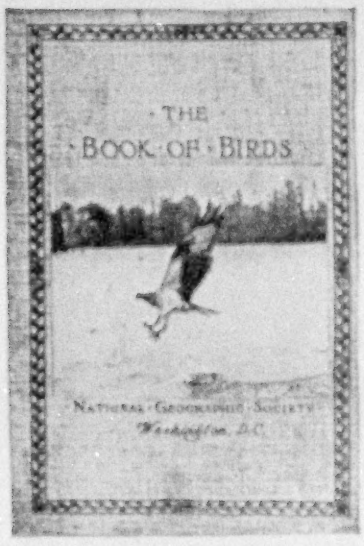
Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horse-drawn mowers with three horses and three men.

Does not smash the grass to earth and plaster it in the mud in springtime, neither does it crush the life out of the grass between hot rollers and hard, hot ground in summer, as does the motor mower.

The public is warned not to purchase mowers infringing the Townsend Patent, No. 1,209,519, December 19th, 1916.

Write for catalog illustrating all types of Lawn Mowers.

S. P. TOWNSEND & CO.
27 Central Avenue Orange, New Jersey

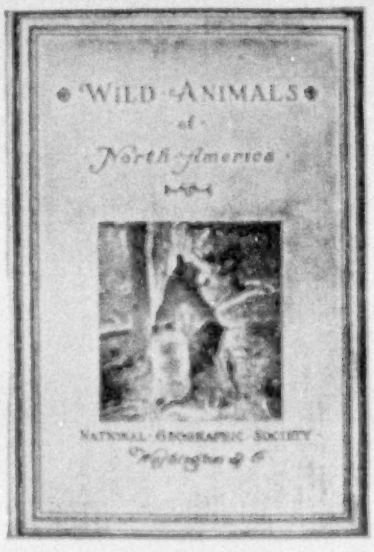


See the Woods with New Eyes

Pack these two out-of-doors books in your vacation kit or have them handy on porch table for guests and children. Their many color plates and fascinating text will enable adult or child to identify, appreciate, and really gain deep delight from every feathered or befurred creature he sees on his country rambles.

$3.00 each, postpaid in U. S. Circular on request.

NATIONAL GEOGRAPHIC SOCIETY
WASHINGTON, D. C.



THIS MAGAZINE IS FROM OUR PRESSES

JUDD & DETWEILER, INC.
MASTER PRINTERS

ECKINGTON PLACE AND FLORIDA AVENUE WASHINGTON, D. C.

The Prophy-lac-tic Tooth Brush

Ask your druggist for "the brush in the yellow box"—he knows

Zinc

Keeps Value in Property

The film of paint that stands between your property and decay is as thin as the paper on which this advertisement appears.

Yet, without it, the deterioration would lower the value of the property in a comparatively short time.

Think, then, of the care necessary in selecting materials used in the paint that covers your buildings.

Paints that endure contain a generous proportion of Zinc Oxide, for this material imparts a toughness that protects the surface against its arch-enemy—the weather. Such coatings have longer life, and are, therefore, the most economical. They hold their color; maintain the beauty and prolong the life of your buildings. Moreover, chalking of such paints is greatly retarded. They can be washed without injury.

We have prepared a booklet, entitled "Painting Specifications," which contains much useful information for those who contemplate any painting job. A copy will be furnished upon request.

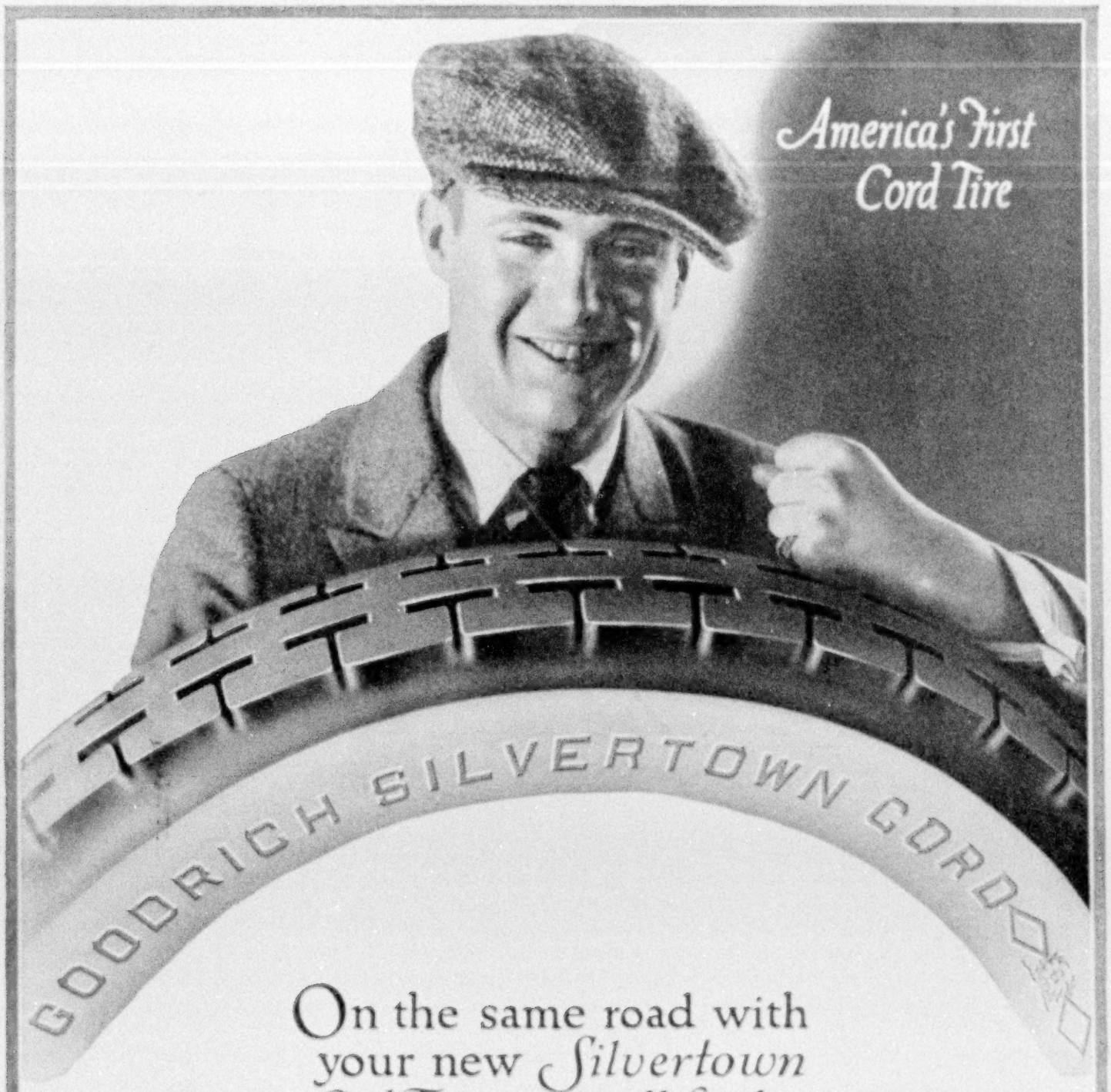
THE NEW JERSEY ZINC COMPANY, *160 Front Street*, New York
ESTABLISHED 1848

CHICAGO: Mineral Point Zinc Company, 1111 Marquette Building
PITTSBURGH: The New Jersey Zinc Co. (of Pa.), 1439 Oliver Building

Manufacturers of Zinc Oxide, Slab Zinc (Spelter), Spiegeleisen, Lithopone, Sulphuric Acid, Rolled Zinc Strips and Plates, Zinc Dust, Salt Cake, and Zinc Chloride

The world's standard for Zinc products

New Jersey
Zinc



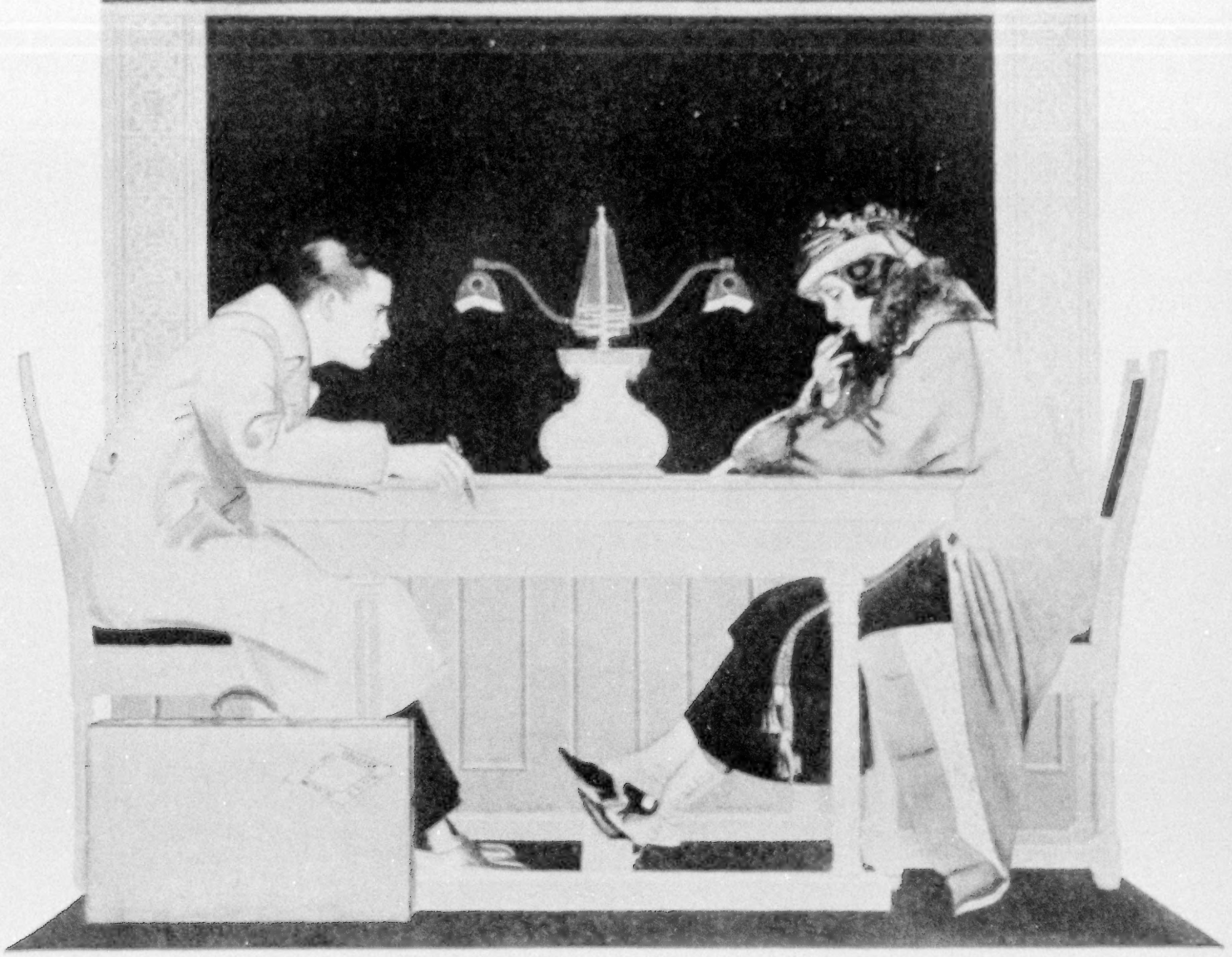
On the same road with your new *Silvertown Cord Tires*, you will find a lot of the *Silvertown Cords* of last year, and the year before, still delivering the miles.

Goodrich Tires

Best in the Long Run

The B. F. Goodrich Rubber Company, Akron, Ohio • Adjustment Basis: Silvertown Cords, 8000 Miles; Fabric Tires, 6000 Miles

SHEAFFER'S PEN
AND PENCIL



His Diary

Sept. 12—Arrived right side up. School again tomorrow and my SHEAFFER Fountain Pen is filled with words of wisdom. Someone very distracting on the other side of the desk. She is surely *some* peach. It takes a mighty good pen to write under such difficulties.

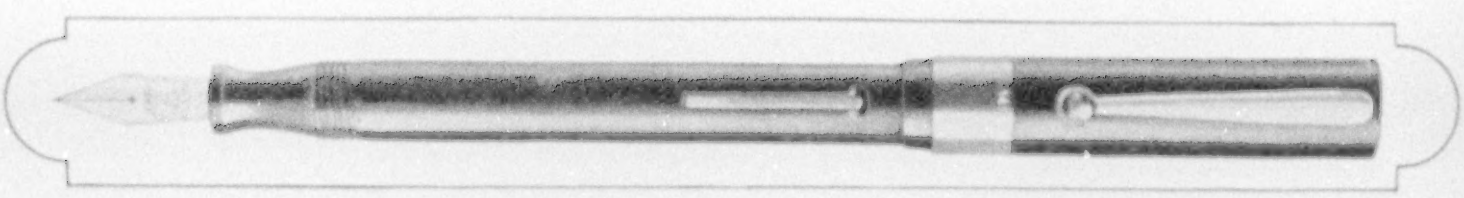
Her Diary

Sept. 12—Arrived safe. School opens tomorrow and my lovely new SHEAFFER quite prepares me to take down copious notes. Somebody very interesting came and sat opposite me today, and I noticed he uses a SHEAFFER too. So far our tastes agree.

Fashionable Ebony Finished Pen, illustrated below, with plain solid gold band and clip—No. 29C—$8.00

W. A. SHEAFFER PEN COMPANY, 237 SHEAFFER BUILDING, FORT MADISON, IOWA

CHICAGO NEW YORK KANSAS CITY SAN FRANCISCO



PRESS OF JUDD & DETWEILER, INC.
WASHINGTON, D. C.

XUM

"You can't rub him the wrong way"

"That's the beauty of that fellow Williams'—his ability to adapt himself to whatever condition arises. He can get on without pull—his rich and creamy lather has satisfied his thousands of friends of that. Over 75 years of experience have taught him all the curves in his business. And even the young blades admit that daily contact with him seems to make them sharper.

"Williams' has a lot of near relatives. But somehow they don't seem to have quite his gentle, soothing manner—or his perpetual good humor that never becomes dry.

"If you don't know Williams' take a tip from me and make his acquaintance. You won't have any trouble picking him out of the crowd."

Send 10 cents for trial Re-Load Stick

The Re-Load has a firm threaded metal collar. You simply screw this into the holder-cap. Send 10c. in stamps for sample, *full-size* permanent holder-top, with reduced-size soap. When the sample is used up, you need buy only the new Re-Load, saving the cost of a new holder-top.

THE J. B. WILLIAMS CO.
Dept. A
Glastonbury, Conn.

Williams' Shaving Soap also comes in the forms of cream, liquid and powder. Trial size of any of these for 6c. in stamps.

Re-Loads Williams' Holder Top Shaving Stick

Williams' PATENTED Holder Top Shaving Stick

THE J.B. WILLIAMS COMPANY MAKERS ALSO OF *MATINEE VIOLETS, JERSEY CREAM* AND OTHER TOILET SOAPS, TALC POWDER, DENTAL CREAM ETC